

Rigid Aluminum Conduit, Nipples, Elbows, & Couplings
Stainless Steel Conduit, Nipples, Elbows, & Couplings
EMT Elbows
Galvanized Rigid Elbows, Nipples, & Couplings

Electrical Conduit Products

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American Manufacturing

There was a time when America was synonymous with manufacturing, with production, with innovation. Hardworking, earnest people made good quality products, had good paying jobs, and our businesses flourished.

Then suddenly, the Industrial Revolution that helped shape our Nation packed up and went into early retirement. Unemployment went up, quality went down, GDP growth slowed, and an entire segment of our economy effectively hit the “pause” button.

Well, today is a new day.

A growing number of American companies are starting to bring production back to our shores...and Patriot is proud to be counted among that group. We are very proud to be an American Manufacturer, and we are very proud to support the US Military Veterans in our workforce.

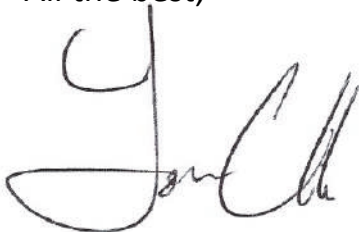
Our Rigid Aluminum Conduit is 100% American Made ~ the shells, the couplings, the caps, and even our labels all come from American companies. Our shells come from extrusion dies we own, are completely produced in America, and are processed on our high speed equipment.

Patriot is still the only American Owned & Operated Family Business producing the full lines of Rigid Aluminum & Rigid Stainless Steel Conduit, Nipples, Elbows, and Couplings, as well as EMT & GRC Nipples and Elbows. All Made in our Factory in Louisa Virginia.

While most of our orders ship next day from Virginia, we also maintain inventories in Atlanta, Boston, Chicago, Houston, Louisville KY, New Orleans, North Carolina, Richmond VA, and Tampa FL. Simply stated, Patriot’s goal is to provide **A Better Conduit Experience™**.

There is a new Industrial Revolution starting in America,
thank you for joining us in it.

All the best,



Tom Click
President & CEO



tom.click@patriotsas.com
Cell – 434-825-2652

The Patriot Story

Patriot was founded in 2010 by Tom & Sarah Click. Like many American Manufacturing startups, Patriot's beginnings were small and focused. Launching right after the Great Recession, the original business consisted of:

Tom Click + 1,000 Square Feet of Leased Space + 1 Hand Threading Machine

After finalizing the business plan, and finding a banker who knew what pipe was, Tom & Sarah pulled money out of their 401ks to complete the initial funding. It was a big risk, and it paid off.

By the end of 2010, Patriot had it's first Landis Double End Threading Machine. From the very beginning, Patriot was committed to the "[Traditional Values of American Manufacturing](#)" i.e., producing the absolute best quality and providing unmatched service and flexibility, all while maintaining a competitive price. Adherence to these values resulted in rapid growth for the company. In 2017, for the [3rd year in a row](#), Patriot was named to Inc Magazine's list of the 5000 Fastest Growing Companies in America.

Today Patriot has a new, fully modernized 30,000 SqFt building in Louisa, Virginia, and 45,000 SqFt of warehouse space in Richmond Virginia. The company has 62 employees, 10 Delivery Vehicles, 5 Landis Double Head Conduit Production Lines, 15 Haas CNC Centers, a 10 station Nipple Line, 2 Wallace Large Radius Shipyard Benders, and 6 Pedrick Rotary Compression Benders. Approximately half of the workforce are US Military Veterans. Patriot maintains \$5,000,000 of inventory in 10 Regional Warehouses Nationwide.

Looking ahead, Tom & Sarah intend to continue to grow Patriot by adding new products, new production capabilities, and even new production facilities...continuing the story for the next generation, and inspiring action in support of [American Manufacturing](#).



The Patriot Team



The Patriot Teams - Sales, Logistics, Operations, Accounting, & Administration



Patriot Blue™ Drivers



The Conduit Craftsmen



Rosie, John Griffin, Rosie



Tom, Sarah, Joe, Ian, and Helen Click

The Factory

High Speed Conduit Threading



Precision CNC Machining



Custom Bundles & Kitting via Quicksilver™



Large Diameter Bending Work cell



Free Delivery with No Min via Patriot Blue™



GRC, EMT, Aluminum, & Stainless



Patriot's Products

Only Patriot has all 4 Materials!
Aluminum, Stainless Steel, Galvanized Steel & EMT



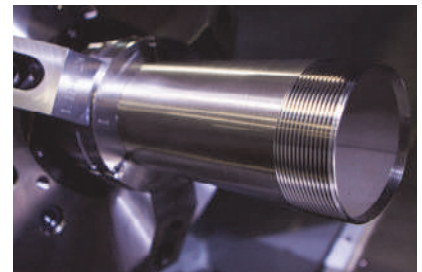
Rigid Aluminum

- Conduit
- Nipples
- Elbows
- Couplings



Rigid Stainless Steel

- Conduit
- Nipples
- Elbows
- Couplings



Rigid Galvanized Steel

- Nipples
- Elbows
- Couplings

EMT

- Elbows

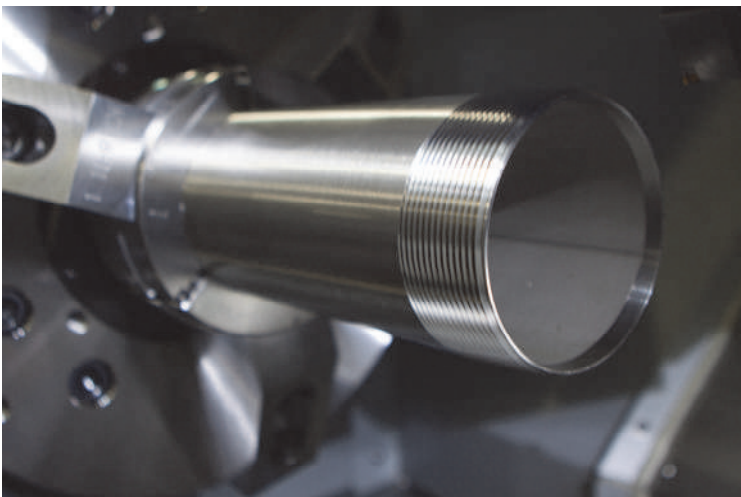


Join The New Industrial Revolution™

Advanced CNC Manufacturing



The Cleanest & Sharpest Threads



Trademark Packaging for Safer Jobsites

Cleaner, Safer, Faster!

Patriot Aluminum Products has spent years developing custom designed packaging solutions to make Jobsites and Distributor Warehouses Cleaner and Safer. It's one of our Trademarks...you can tell it's a Patriot product simply from the packaging!

The Patriot EcoPack™

Designed for Contractors & Distributors, the Patriot EcoPack™ eliminates many of the problems associated with traditional cardboard boxes.

With a clear body and re-sealable snap-tight lid, this new Patent Pending packaging not only keeps jobsite dirt, dust, and moisture away from your fittings...it also makes it easy to see how many nipples or couplings are left in the box.



For Both GRC and Aluminum

UniPack™, CleanHold™ & QuickSilver™

During our start-up in 2010, Patriot developed an industry leading UniPack™ System which allows all sizes of conduit to stack neatly and safely. This Trademark system also provides a taller “gap” for forklift forks and reduces the potential for damage when unloading and staging.

CleanHold™ secures sub-bundles, without the sticky residue created by traditional fiberglass tape.

Patriot's custom designed and patent pending QuickSilver™ pallet makes it easy to create custom Project Packs and ships via an enclosed carrier. It also elevates the conduit while on the jobsite, reducing dirt or debris on the tubes.



Always Look for Patriot's Trademark UL Label



The Answer is “Yes” ...what’s the question?

Unmatched Flexibility and Speed

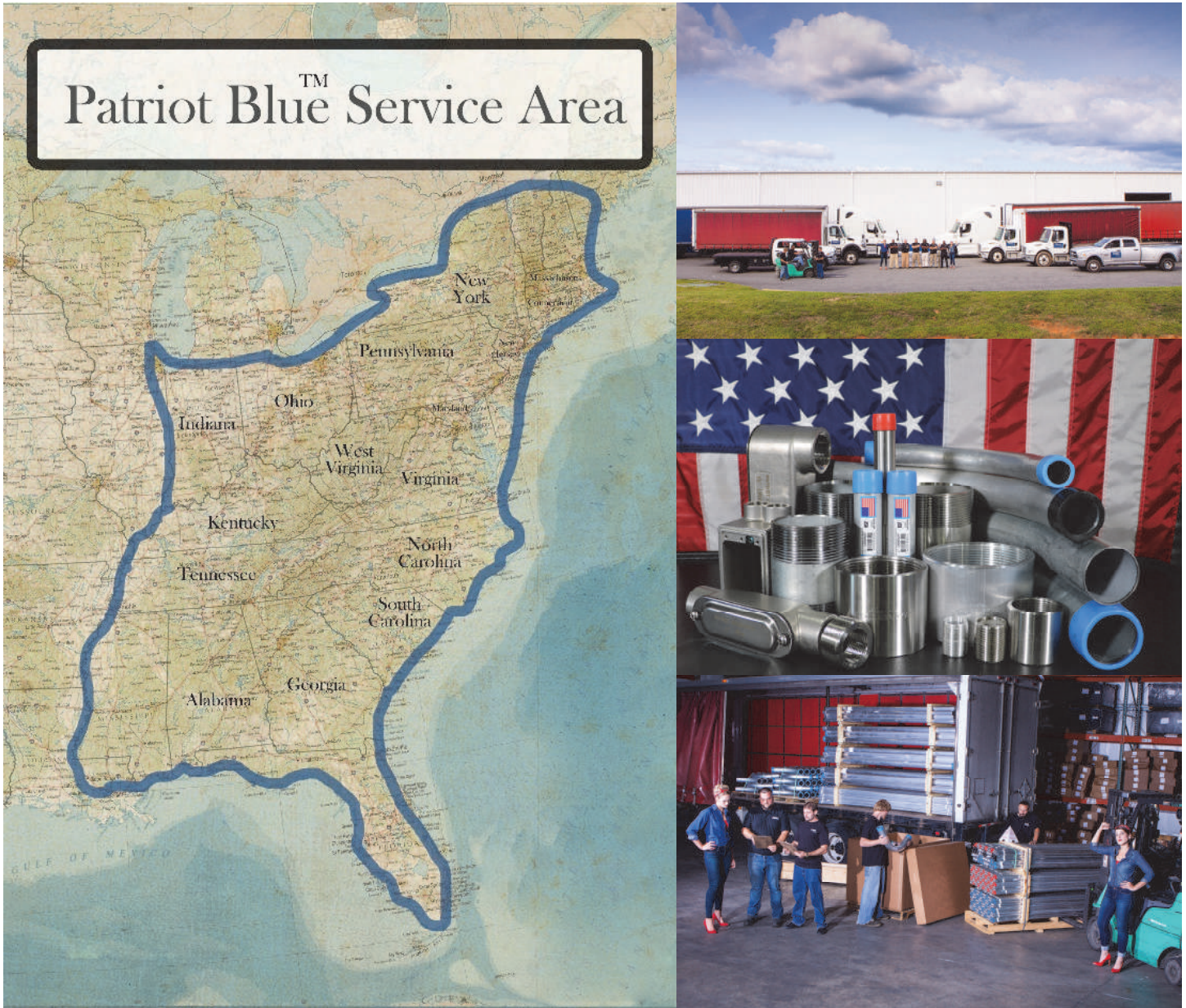


Customers Receive Photos of Each Shipment



The Patriot Truck is Coming!

Are you still paying for freight?



What Can Patriot Blue™ Do For You?

Patriot Aluminum has 10 delivery vehicles that run weekly routes through the Midwest, Southeast, Mid Atlantic, and Northeast...we like to call it **Patriot Blue™**. The service is **Free**, and there are **No Prepaid Minimums...that's right, No Minimums.**

Joint Training Calls



Patriot routinely makes **Joint Calls to Target Accounts** with Distributor Sales personnel. We also provide Field Training for any and all of our conduit products. Above are a few photos of our **Plant Manager, John T. Griffin** showing several Contractors and Engineers how to properly thread 316 Stainless Steel, on their equipment in their facility.



Targeted Customer Events & Promos

2017 Mini Cooper Sponsorship



The Town of Dayton
VIRGINIA

Home | History | Town Departments | Town Government | Community

THE DAYTON MUDDLER A 3.2 MILE COURSE WITH A CAUSE

ready to get dirty?
REGISTER

BOULDER CREST HOME VIRGINIA ARIZONA PROGRAMS GET INVOLVED ABOUT [DONATE NOW](#)

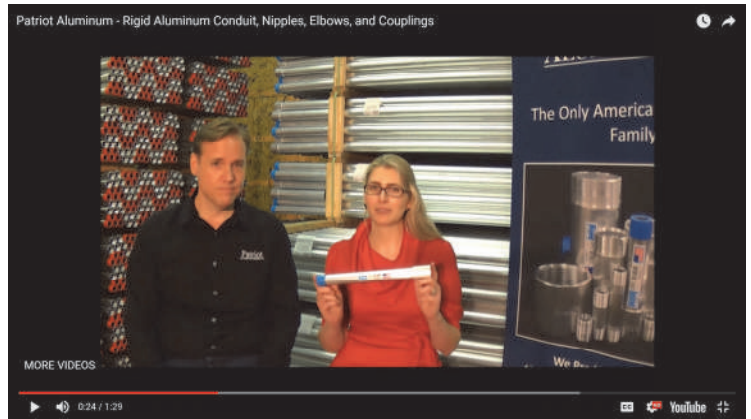
**HEALING HEROES.
ONE FAMILY AT A TIME.**

[WATCH THE VIDEO](#)

**SAT. AUGUST 5, 2017
COLLEGE ST. PAVILION
360 COLLEGE ST. DAYTON VA AT 8:00 AM**

Online Company Videos

Product Training



Company Culture



Patriot

STEEL PRODUCTS



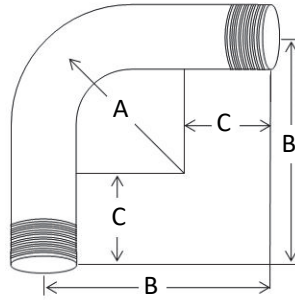
Galvanized / EMT



- GRC Elbows, Nipples, & Couplings
- EMT Elbows
- No Freight and No Minimums when it rides on Patriot Blue™
- Manufactured in USA

Galvanized Rigid & EMT Conduit Fittings

Galvanized / EMT



Rigid Galvanized Steel Elbow Data – UL6 – File #E467495 – Made in USA

Standard Radius 90° GRC Elbows						
Trade Size	Standard Carton	Wgt per 100 Pcs	Nominal Dimensions			Part Number
			Radius R	B	C	
U.S.	Qty	Lbs	in	in	in	
1/2	50	73	4	6-3/16	1-1/2	RGS3-012-90S
3/4	50	107	4-1/2	6-3/4	1-1/2	RGS3-034-90S
1	20	198	5-3/4	8-5/8	1-7/8	RGS3-100-90S
1-1/4	20	309	7-1/4	10-1/16	2	RGS3-114-90S
1-1/2	10	430	8-1/4	11-9/16	2	RGS3-112-90S
2	10	700	9-1/2	14-1/16	2	RGS3-200-90S
2-1/2	10	1281	10-1/2	16	3	RGS3-212-90S
3	10	2045	13	19-11/16	3-1/8	RGS3-300-90S
3-1/2	5	2787	15	22-3/16	3-1/4	RGS3-312-90S
4	5	3385	16	23-1/8	3-3/8	RGS3-400-90S
5	Bulk	7233	24	36-1/8	3-5/8	RGS3-500-90S
6	Bulk	11193	30	42-15/16	3-3/4	RGS3-600-90S

Standard Radius 45° GRC Elbows						
Trade Size	Standard Carton	Wgt per 100 Pcs	Nominal Dimensions			Part Number
			Radius R	B	C	
U.S.	Qty	Lbs	in	in	in	
1/2	50	62	4.00	7-13/16	3-1/4	RGS3-012-45S
3/4	50	91	4.50	8-11/16	3-5/8	RGS3-034-45S
1	20	141	5.75	9-3/16	3-13/16	RGS3-100-45S
1-1/4	20	223	7.25	10-11/16	4-7/16	RGS3-114-45S
1-1/2	10	296	8.25	11-13/16	4-7/8	RGS3-112-45S
2	10	496	9.50	14-7/8	6-1/8	RGS3-200-45S
2-1/2	10	978	10.50	18-5/16	7-9/16	RGS3-212-45S
3	10	1424	13.00	20-9/16	8-1/2	RGS3-300-45S
3-1/2	5	1943	15.00	23-3/16	9-5/8	RGS3-312-45S
4	5	2403	16.00	24-1/2	10-1/8	RGS3-400-45S
5	Bulk	4900	24.00	38-1/4	15-7/8	RGS3-500-45S
6	Bulk	7000	30.00	42	17-3/8	RGS3-600-45S

~ Standard radius elbows also available in 60, 30, 22 1/2, 15 and 11 1/4.

~ Special Large Radius 90° RGS Elbows are available with up to a 60" Radius.

EMT Steel Elbow Data – UL797 – File #E467495 – Made in USA

Standard Radius 90° EMT Elbows						
Trade Size	Standard Carton	Wgt per 100 Pcs	Nominal Dimensions			Part Number
			Radius R	B	C	
U.S.	Qty	Lbs	in	in	in	
1/2	50	29	4	6-3/16	1-1/2	EMT3-012-90S
3/4	50	43	4-1/2	6-3/4	1-1/2	EMT3-034-90S
1	20	71	5-3/4	8-5/8	1-7/8	EMT3-100-90S
1-1/4	20	110	7-1/4	10-1/16	2	EMT3-114-90S
1-1/2	10	153	8-1/4	11-9/16	2	EMT3-112-90S
2	10	249	9-1/2	14-1/16	2	EMT3-200-90S
2-1/2	10	437	10-1/2	16	3	EMT3-212-90S
3	10	767	13	19-11/16	3-1/8	EMT3-300-90S
3-1/2	5	1036	15	22-3/16	3-1/4	EMT3-312-90S
4	5	1228	16	23-1/8	3-3/8	EMT3-400-90S

Standard Radius 45° EMT Elbows						
Trade Size	Standard Carton	Wgt per 100 Pcs	Nominal Dimensions			Part Number
			Radius R	B	C	
U.S.	Qty	Lbs	in	in	in	
1/2	50	23	4.00	7-13/16	3-1/4	EMT3-012-45S
3/4	50	38	4.50	8-11/16	3-5/8	EMT3-034-45S
1	20	60	5.75	9-3/16	3-13/16	EMT3-100-45S
1-1/4	20	103	7.25	10-11/16	4-7/16	EMT3-114-45S
1-1/2	10	139	8.25	11-13/16	4-7/8	EMT3-112-45S
2	10	214	9.50	14-7/8	6-1/8	EMT3-200-45S
2-1/2	10	420	10.50	18-5/16	7-9/16	EMT3-212-45S
3	10	595	13.00	20-9/16	8-1/2	EMT3-300-45S
3-1/2	5	771	15.00	23-3/16	9-5/8	EMT3-312-45S
4	5	1015	16.00	24-1/2	10-1/8	EMT3-400-45S

~ Standard radius elbows also available in 60, 30, 22 1/2, 15 and 11 1/4.

~ Special Large Radius 90° EMT Elbows are available with up to a 48" Radius.

Galvanized Steel Coupling Data – UL6 – File #E300771 – Made in USA

Trade Size	Approx Wt Per 100 Pieces	Nominal Outside Diameter	Length	Part Number
U.S.	lb	in	in	
1/2	17	1.010	1.63	RGS2-012-D
3/4	26	1.250	1.64	RGS2-034-D
1	34	1.530	1.97	RGS2-100-D
1-1/4	51	1.870	2.03	RGS2-114-D
1-1/2	61	2.160	2.06	RGS2-112-D
2	90	2.650	2.13	RGS2-200-D
2-1/2	193	3.250	3.19	RGS2-212-D
3	260	3.870	3.31	RGS2-300-D
3-1/2	358	4.500	3.41	RGS2-312-D
4	397	4.880	3.52	RGS2-400-D
5	866	6.000	3.95	RGS2-500-D
6	1000	7.200	4.25	RGS2-600-D



Galvanized / EMT

Galvanized Steel Nipple Data – File #E467496 – Made in USA

Trade Size	Close Length	CLOSE		1-1/2"		2"		2-1/2"		3"		3-1/2"	
		Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100
1/2	1-1/8"	25	6	25	8	25	12	25	15	25	19	25	22
3/4	1-3/8"	25	9	25	9	25	14	25	19	25	24	25	28
1	1-1/2"	25	16			25	22	25	28	25	36	25	43
1-1/4	1-5/8"	25	22			25	28	25	37	25	47	25	55
1-1/2	1-3/4"	25	28			25	34	25	44	25	56	25	68
2	2"	25	44					25	59	25	72	25	88
2-1/2	2-1/2"	10	84							10	100	10	120
3	2-5/8"	10	118							10	130	10	157
3-1/2	2-3/4"	10	160										
4	2-7/8"	10	180										
5	3"		240										
6	3-1/8"		350										

Trade Size	Close Length	4"		5"		6"		8"		10"		12"	
		Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100
1/2	1-1/8"	25	26	25	33	25	40	25	54	25	68	25	82
3/4	1-3/8"	25	34	25	43	25	52	25	73	25	89	25	109
1	1-1/2"	25	49	25	64	25	78	25	109	25	138	25	166
1-1/4	1-5/8"	25	66	25	84	25	100	25	136	25	176	25	216
1-1/2	1-3/4"	25	80	25	103	25	122	25	170	25	216	25	260
2	2"	25	103	25	132	25	160	25	220	25	285	25	335
2-1/2	2-1/2"	10	150	10	197	10	240	10	329	10	422	10	505
3	2-5/8"	10	200	10	260	10	300	10	411	10	528	10	630
3-1/2	2-3/4"	10	240	10	320	10	373	10	510	10	655	10	785
4	2-7/8"	5	285	5	380	5	440	2	600	2	775	2	925
5	3"				480		600		825		1055		1260
6	3-1/8"				660		820		1125		1440		1720

~ Custom length nipples are available. Any length, any quantity.



July 4, 2019

Galvanized / EMT

Manufacturer's Certification

Patriot's GRC Elbows, Nipples & Couplings and EMT Elbows

This certification applies to the following products that have been manufactured in the United States:

- Galvanized Rigid Conduit Elbows, Nipples, & Couplings
- EMT Elbows

It is hereby certified that the above referenced products:

1. Are made from Steel which has been Made and Melted in the USA
2. Meets the provisions of the Buy American Act
3. Meets the provisions of the American Recovery and Reinvestment Act (ARRA)
4. GRC Elbows, Nipples, & Couplings meet or exceed:
 - the UL 6 Standard For Electrical Rigid Metal Conduit – Steel requirements and are listed with the Underwriters Laboratories, File # E467495
 - the American National Standard Institute (ANSI) C80.1 and B1.20.1 Standards
 - Federal Specification WW-C-581 class 1 type A
 - CSA Standard C22.2
5. EMT Elbows meet or exceed:
 - the UL 797 Standard For Electrical Rigid Metal Conduit – Steel requirements and are listed with the Underwriters Laboratories, File # E467495
 - the American National Standard Institute (ANSI) C80.3 Standard
 - ASTM Specification A787
 - CSA Standard C22.1

Under penalty of perjury, I declare that I have examined this certification statement, and to the best of my knowledge and belief, the facts presented are true, correct, and complete.

All the best,

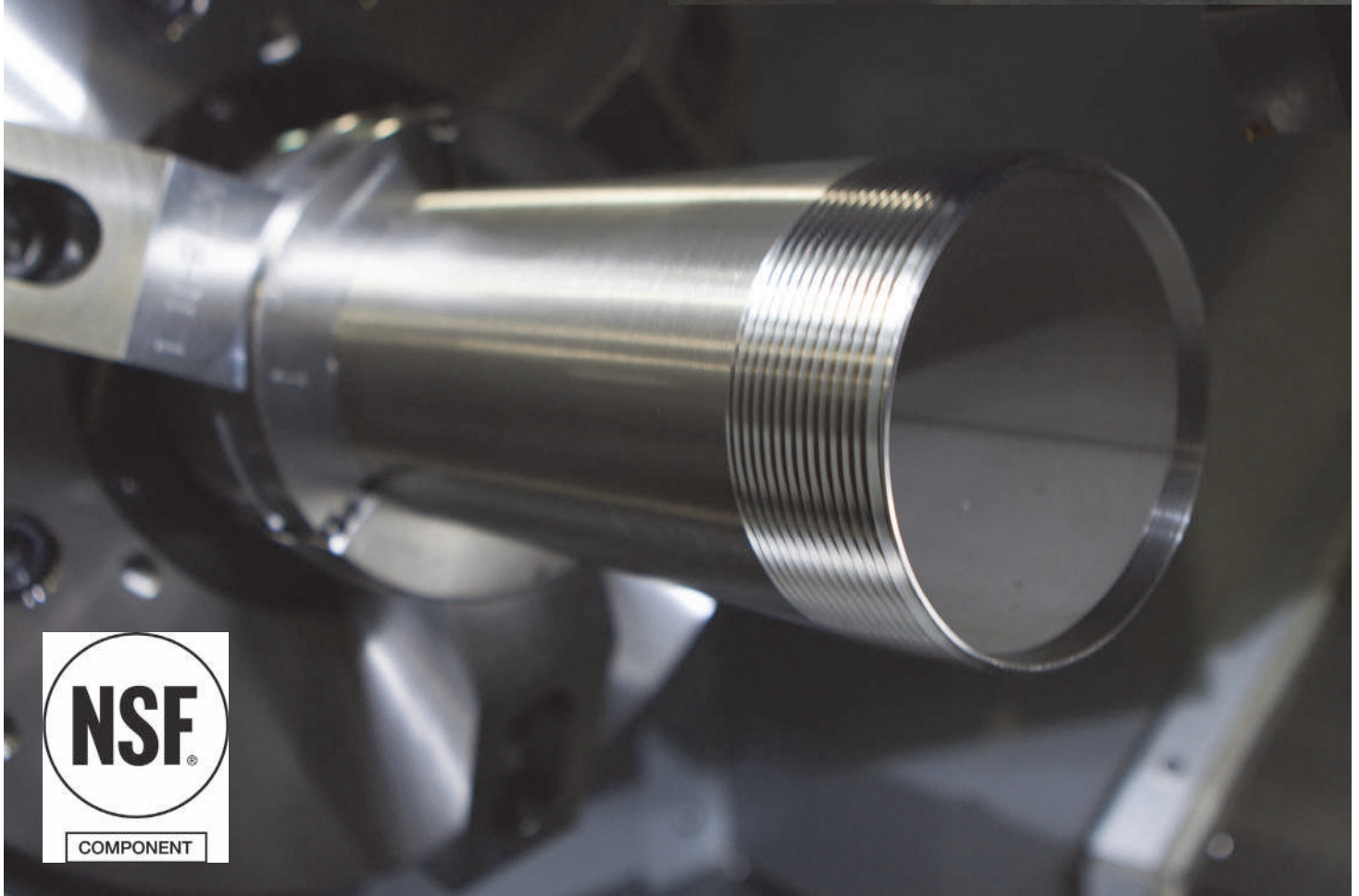
Tom Click
President & CEO
Patriot Aluminum Products, LLC



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Cell - 434-825-2652

Patriot

STAINLESS PRODUCTS



Stainless Steel



- Rigid Stainless Steel Conduit, Nipples, Elbows, and Couplings
- No Freight and No Minimums when it rides on Patriot Blue™
- Manufactured in Virginia



Stainless Steel Application Data

Stainless Steel Rigid Conduit is recommended for highly corrosive environments and is often used in conjunction with Rigid Aluminum Conduit as a cost effective solution for the most demanding applications.

Typical Applications

- Chemical Plants
- Extraction & Refining
- Food Processing
- Marine & Coastal
- Petrochemical Facilities
- Pharmaceutical Facilities
- Pulp & Paper Mills

Stainless Steel

Stainless Steel Specification Data

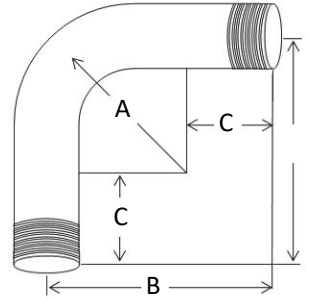
Material: 304 & 316 Stainless Steel – All Products are polished to a bright finish
 Products: Conduit – Standard NPT Threads, Includes One Coupling per Length
 Couplings – Standard NPS Straight Threads
 Elbows – Standard NPT Threads, Color Coded Thread Protectors on Both Ends
 Standards : UL 6A “Standard for Electrical Rigid Metal Conduit – Aluminum, Red Brass, and Stainless Steel
 ANSI C80.1
 CSA Standard C22.2 no 45.2-08
 UL File #: File # E337297

Stainless Steel Rigid Conduit Data

Trade Size		Approx Wt Per 100 Feet (30.5M)		Nominal Outside Diameter		Nominal Wall		Length without Coupling		Part Number	
U.S.	Metric	lb	kg	in	mm	in	mm	ft	mm	Type 304	Type 316
1/2	16	82.0	37.2	0.840	21.3	0.104	2.64	9' 11-1/4"	3030	304SS1-012	316SS1-012
3/4	21	109.0	49.4	1.050	26.7	0.107	2.72	9' 11-1/4"	3030	304SS1-034	316SS1-034
1	27	161.0	73.0	1.315	33.4	0.126	3.20	9' 11"	3025	304SS1-100	316SS1-100
1-1/4	35	218.0	98.9	1.660	42.2	0.133	3.38	9' 11"	3025	304SS1-114	316SS1-114
1-1/2	41	263.0	119.3	1.900	48.3	0.138	3.51	9' 11"	3025	304SS1-112	316SS1-112
2	53	350.0	158.8	2.375	60.3	0.146	3.71	9' 11"	3025	304SS1-200	316SS1-200
2-1/2	63	559.0	253.6	2.875	73.0	0.193	4.90	9' 10-1/2"	3010	304SS1-212	316SS1-212
3	78	727.0	329.8	3.500	88.9	0.205	5.21	9' 10-1/2"	3010	304SS1-300	316SS1-300
4	103	1008.0	457.2	4.500	114.3	0.225	5.72	9' 10-1/4"	3005	304SS1-400	316SS1-400

Stainless Steel Coupling Data

Trade Size		Approx Wt Per 10 Pieces		Nominal Outside Diameter		Length		Part Number	
U.S.	Metric	lb	kg	in	mm	in	mm	Type 304	Type 316
1/2	16	1.7	0.8	1.080	27.4	1.56	39.6	304SS2-012	316SS2-012
3/4	21	2.6	1.2	1.330	33.8	1.62	41.1	304SS2-034	316SS2-034
1	27	3.4	1.5	1.560	39.6	2.00	50.8	304SS2-100	316SS2-100
1-1/4	35	5.1	2.3	1.950	49.5	2.06	52.3	304SS2-114	316SS2-114
1-1/2	41	6.1	2.8	2.220	56.4	2.06	52.3	304SS2-112	316SS2-112
2	53	9.0	4.1	2.750	69.8	2.12	53.8	304SS2-200	316SS2-200
2-1/2	63	19.3	8.8	3.280	83.3	3.12	79.2	304SS2-212	316SS2-212
3	78	26.0	11.8	3.940	100.8	3.25	82.6	304SS2-300	316SS2-300
4	103	39.7	18.0	5.000	127.0	3.50	88.9	304SS2-400	316SS2-400



Stainless Steel Elbow Data – 90 Degree Standard Radius

Trade Size		Approx Wt Per 10 Pieces		Nominal Dimensions						Part Number	
U.S.	Metric	lb	kg	A		B		C		Type 304	Type 316
				in	mm	in	mm	in	mm		
1/2	16	7.3	3.3	4.00	101.6	6.50	165.1	2.50	63.5	304SS3-012-90S	316SS3-012-90S
3/4	21	10.6	4.8	4.50	114.3	7.25	184.2	2.75	69.9	304SS3-034-90S	316SS3-034-90S
1	27	19.8	9.0	5.75	146.1	8.38	212.7	2.88	73.0	304SS3-100-90S	316SS3-100-90S
1-1/4	35	30.9	14.0	7.25	184.2	10.25	260.6	3.00	76.2	304SS3-114-90S	316SS3-114-90S
1-1/2	41	43.0	19.5	8.25	209.6	11.88	301.6	3.63	92.1	304SS3-112-90S	316SS3-112-90S
2	53	70.0	31.8	9.50	241.3	14.00	355.6	4.50	114.3	304SS3-200-90S	316SS3-200-90S
2-1/2	63	128.1	58.1	10.50	266.7	15.75	400.1	5.25	133.4	304SS3-212-90S	316SS3-212-90S
3	78	204.5	92.7	13.00	330.2	18.75	476.3	5.75	146.1	304SS3-300-90S	316SS3-300-90S
4	103	331.3	150.3	16.00	406.4	23.00	584.2	7.00	177.8	304SS3-400-90S	316SS3-400-90S

~ Standard radius elbows also available in 60, 30, 22 1/2, 15 and 11 1/4.

Stainless Steel

Stainless Steel Nipples are Available in Any Length or Quantity





July 4, 2019

Manufacturer's Certification Patriot's Rigid Metal Conduit – Stainless Steel

This certification applies to the following products that have been manufactured in the United States, at Patriot Aluminum Products, LLC located in Louisa, VA:

- Rigid Stainless Steel Conduit, Nipples, Elbows, and Couplings

It is hereby certified that the above referenced product:

1. Meets the provisions of the Buy American Act
2. Meets the provisions of the American Recovery and Reinvestment Act (ARRA)
3. Meets or exceeds the UL 6A Standard For Electrical Rigid Metal Conduit – Aluminum, Bronze, and Stainless Steel requirements and are listed with the Underwriters Laboratories, File # E337297
4. Meets or exceeds the American National Standard Institute (ANSI) C80.5 Standard
5. Meets or exceeds Federal Specification WW-C-540c
6. Meets or exceeds ASTM Specification B221
7. Meets or exceeds CSA Standard C22.2 No. 45.2
8. Meets or exceeds NSF/ANSI Specification 169

Under penalty of perjury, I declare that I have examined this certification statement, and to the best of my knowledge and belief, the facts presented are true, correct, and complete.

All the best,



Tom Click
President & CEO
Patriot Aluminum Products, LLC

tom.click@patriotsas.com
Cell - 434-825-2652

Patriot

ALUMINUM PRODUCTS



Aluminum



- Rigid Aluminum Conduit, Nipples, Elbows, and Couplings
- No Freight and No Minimums when it rides on Patriot Blue™
- Manufactured in Virginia

Typical Applications for Aluminum Conduit

Application	Aluminum Conduit Preference									
	Material Cost	Installation Labor Cost	Weight	Freight Savings	Corrosion Resistance	Non-Sparking	Voltage Drop	Rust Free	Non-Magnetic	Heat Buildup
General Industrial	•	•	•	•	•			•		
General Commercial	•	•	•					•		
Bridges/Tunnels	•	•	•		•			•		
Chemical Plants	•	•	•	•	•	•	•	•		•
Food Processing	•	•	•	•	•	•		•		•
High Voltage Installations	•	•	•				•	•	•	•
Natural Gas Processing/Pump Stations	•	•	•	•		•		•		
Oil Refineries	•	•	•	•	•	•		•		•
Power Plants	•	•	•	•	•		•	•	•	•
Pulp/Paper Mills	•	•	•		•	•		•		•
Rooftop HVAC	•	•	•		•			•		
Telecom	•	•	•		•			•	•	•
Textile Mills	•	•	•	•	•	•		•		•
Transportation Manufacturers	•	•	•	•	•			•		
Wastewater/Water Treatment	•	•	•	•	•	•		•		•

Aluminum



Patriot
ALUMINUM PRODUCTS



Rigid Aluminum Versus Rigid Steel

Material Cost Savings when Using Aluminum

Trade Size	Savings per 100 Feet	Savings per 1,000 Feet	Savings per 10,000 Feet
1/2"	\$ 37.46	\$ 374.61	\$ 3,746.05
3/4"	\$ 16.40	\$ 164.01	\$ 1,640.10
1"	\$ 39.64	\$ 396.39	\$ 3,963.85
1 1/4"	\$ 71.95	\$ 719.51	\$ 7,195.10
1 1/2"	\$ 59.55	\$ 595.49	\$ 5,954.85
2"	\$ 51.82	\$ 518.16	\$ 5,181.55
2 1/2"	\$ 184.60	\$ 1,845.97	\$ 18,459.65
3"	\$ 127.28	\$ 1,272.76	\$ 12,727.55
3 1/2"	\$ 228.11	\$ 2,281.07	\$ 22,810.70
4"	\$ 152.38	\$ 1,523.83	\$ 15,238.30
5"	\$ 749.53	\$ 7,495.35	\$ 74,953.45
6"	\$ 965.92	\$ 9,659.21	\$ 96,592.10

Based on Market Prices from the Major Steel & Aluminum Conduit Producers

Additional Aluminum Conduit Advantages

	Steel	Aluminum
Material Cost	Medium	Low
Installation Speed	Slow	Fast
Weight per 10 Ft	High	Low
Corrosion Resistance	Low-Medium	High
Non-Sparking	No	Yes
Non-Magnetic	No	Yes
Rust Free	No	Yes
Voltage Drop	High	Low
Heat Build Up	High	Low

Aluminum

Aluminum Conduit Savings Calculator

Trade Size	Material Cost Savings			Installation Labor Cost Savings				
	Savings per 100 Feet	Savings per 1,000 Feet	Savings per 10,000 Feet	Average Wage	Hours Saved per 100 Feet	Savings per 100 Feet	Savings per 1,000 Feet	Savings per 10,000 Feet
1/2"	\$ 37.46	\$ 374.61	\$ 3,746.05	\$ 45.00	-	-	-	-
3/4"	\$ 16.40	\$ 164.01	\$ 1,640.10	\$ 45.00	-	-	-	-
1"	\$ 39.64	\$ 396.39	\$ 3,963.85	\$ 45.00	-	-	-	-
1 1/4"	\$ 71.95	\$ 719.51	\$ 7,195.10	\$ 45.00	1.5	\$ 67.50	\$ 675.00	\$ 6,750.00
1 1/2"	\$ 59.55	\$ 595.49	\$ 5,954.85	\$ 45.00	2.3	\$ 103.50	\$ 1,035.00	\$ 10,350.00
2"	\$ 51.82	\$ 518.16	\$ 5,181.55	\$ 45.00	3.7	\$ 166.50	\$ 1,665.00	\$ 16,650.00
2 1/2"	\$ 184.60	\$ 1,845.97	\$ 18,459.65	\$ 45.00	5.2	\$ 234.00	\$ 2,340.00	\$ 23,400.00
3"	\$ 127.28	\$ 1,272.76	\$ 12,727.55	\$ 45.00	6.0	\$ 270.00	\$ 2,700.00	\$ 27,000.00
3 1/2"	\$ 228.11	\$ 2,281.07	\$ 22,810.70	\$ 45.00	8.4	\$ 378.00	\$ 3,780.00	\$ 37,800.00
4"	\$ 152.38	\$ 1,523.83	\$ 15,238.30	\$ 45.00	12.4	\$ 558.00	\$ 5,580.00	\$ 55,800.00
5"	\$ 749.53	\$ 7,495.35	\$ 74,953.45	\$ 45.00	15.5	\$ 697.50	\$ 6,975.00	\$ 69,750.00
6"	\$ 965.92	\$ 9,659.21	\$ 96,592.10	\$ 45.00	20.0	\$ 900.00	\$ 9,000.00	\$ 90,000.00

Trade Size	Total Feet	Estimated Material Savings		Estimated Labor Savings	TOTAL ESTIMATED SAVINGS
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
_____	_____	_____	+	_____	= _____
				TOTAL FOR THIS JOB	= _____

Material Cost Savings are based on Market Prices from the Major Steel & Aluminum Conduit Producers
 Installation Labor Cost Savings are based on Calculations from the Aluminum Electrical Conductor Handbook, Chapter 17

Calculate Your Savings @ www.patriotsas.com/resources/cost-savings-calculator.html

Lower Material Cost & Huge Labor Savings

Free Delivery with No Min via Patriot Blue™



July 4, 2019

Manufacturer's Certification Patriot's Rigid Metal Conduit – Aluminum

This certification applies to the following products that have been manufactured in the United States, at Patriot Aluminum Products, LLC located in Louisa, VA:

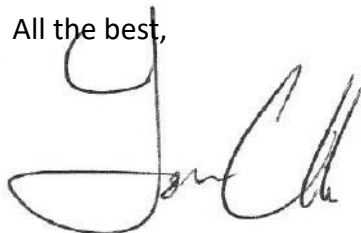
- Rigid Aluminum Conduit, Nipples, Elbows, and Couplings

It is hereby certified that the above referenced product:

1. Meets the provisions of the Buy American Act
2. Meets the provisions of the American Recovery and Reinvestment Act (ARRA)
3. Meets or exceeds the UL 6A Standard For Electrical Rigid Metal Conduit – Aluminum, Bronze, and Stainless Steel requirements and are listed with the Underwriters Laboratories, File # E337297
4. Meets or exceeds the American National Standard Institute (ANSI) C80.5 Standard
5. Meets or exceeds Federal Specification WW-C-540c
6. Meets or exceeds ASTM Specification B221
7. Meets or exceeds CSA Standard C22.2 No. 45.2
8. Meets or exceeds NSF/ANSI Specification 169
9. Is constructed of 6000 Series Aluminum which are generally considered to be “Marine Grade”, “Aerospace Grade”, and “Automotive Grade” alloys. The Tubes are constructed from Aluminum Alloy 6063-T4, and the Couplings are constructed from Aluminum Alloy 6061-T6.
10. Has been constructed from Aluminum which is Melted and Extruded in the USA.

Under penalty of perjury, I declare that I have examined this certification statement, and to the best of my knowledge and belief, the facts presented are true, correct, and complete.

All the best,



Tom Click
President & CEO
Patriot Aluminum Products, LLC



tom.click@patriotsas.com
Cell - 434-825-2652



Made in America ^{Plus}

July 4, 2019

Specification Notes

Patriot's Rigid Metal Conduit - Aluminum

Architects desiring to specify Rigid Metal Conduit - Aluminum from Patriot Aluminum Products should include the following description:

Electrical conductors shall be enclosed in Patriot Aluminum Products' Rigid Metal Conduit - Aluminum in accordance with the National Electrical Code (NEC). Rigid Metal Conduit - Aluminum shall be 6063 Aluminum, manufactured and produced to the following specifications:

- ANSI – American National Standard for Electrical Rigid Aluminum Conduit (ERAC) ANSI, C80.5
- NSF/ANSI Standard 169
- UL Standard for Electrical Rigid Metal Conduit – Aluminum, UL 6A, File # E337297
- National Electric Code, 2008 Article 344
- 2008 NEC Section 250.118(2) recognizes Rigid Metal Conduit as an equipment grounding conductor
- Federal Specification WW-C-540C
- All Trade Sizes (1/2" – 6") shall be manufactured and produced in the United States of America, including:
 - The Shells
 - The Couplings
 - The Thread Protecting Caps
 - The UL Labels
- All Trade Sizes (1/2" – 6") shall be processed using a Threading Lubricant which is:
 - Manufactured from Renewable Raw Materials, and contains no phenolics, nitrites, glycol ethers, DEA, formaldehyde, chlorine or silicone

Please email or call Tom Click with any technical questions.

All the best,

Tom Click
President & CEO
Patriot Aluminum Products, LLC



tom.click@patriotsas.com
Cell - 434-825-2652

Rigid Aluminum Conduit Specifications

Conduit Data

Trade Size		Approx Wt Per 100 Feet (30.5M)		Nominal Outside Diameter		Nominal Wall		Master Bundle				Part Number
U.S.	Metric	lb	kg	in	mm	in	mm	ft	m	lb	kg	
1/2	16	28.1	12.7	0.840	21.3	0.104	2.64	2500	762.5	702.5	317.5	1-012
3/4	21	37.4	17.0	1.050	26.7	0.107	2.72	2500	762.5	935.0	425.0	1-034
1	27	54.5	24.7	1.315	33.4	0.126	3.20	2000	610.0	1090.0	494.0	1-100
1-1/4	35	71.6	32.5	1.660	42.2	0.133	3.38	1000	304.8	716.0	325.0	1-114
1-1/2	41	88.7	40.2	1.900	48.3	0.138	3.51	1000	304.8	887.0	402.0	1-112
2	53	118.5	53.8	2.375	60.3	0.146	3.71	450	137.2	533.3	242.1	1-200
2-1/2	63	187.5	85.0	2.875	73.0	0.193	4.90	300	91.5	562.5	255.0	1-212
3	78	246.3	111.7	3.500	88.9	0.205	5.21	200	61.0	492.6	223.4	1-300
3-1/2	91	295.6	134.1	4.000	101.6	0.215	5.46	200	61.0	591.2	268.2	1-312
4	103	350.2	155.8	4.500	114.3	0.225	5.72	200	61.0	700.4	311.6	1-400
5	129	478.9	217.2	5.563	141.3	0.245	6.22	80	23.4	383.1	173.8	1-500
6	155	630.4	285.9	6.625	168.3	0.266	6.76	60	18.3	378.2	171.5	1-600

Coupling Data

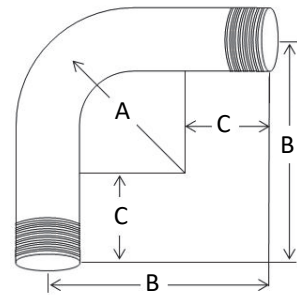
Trade Size		Approx Wt Per 100 Pieces		Nominal Outside Diameter		Length		Standard Package	Part Number
U.S.	Metric	lb	kg	in	mm	in	mm	Pieces	
1/2	16	6.1	2.8	1.080	27.4	1.56	39.6	100	2-012
3/4	21	9.1	4.1	1.330	33.8	1.62	41.1	50	2-034
1	27	12.5	5.7	1.560	39.6	2.00	50.8	50	2-100
1-1/4	35	18.9	8.6	1.950	49.5	2.06	52.3	50	2-114
1-1/2	41	23.3	10.6	2.220	56.4	2.06	52.3	50	2-112
2	53	34.6	15.7	2.750	69.8	2.12	53.8	50	2-200
2-1/2	63	68.3	31.0	3.280	83.3	3.12	79.2	25	2-212
3	78	91.4	41.5	3.940	100.8	3.25	82.6	25	2-300
3-1/2	91	108.0	49.0	4.440	112.8	3.37	85.6	10	2-312
4	103	142.0	64.4	5.000	127.0	3.50	88.9	10	2-400
5	129	241.9	109.7	6.300	160.0	3.75	95.3	5	2-500
6	155	321.0	145.6	7.390	187.7	4.00	101.6	5	2-600



Aluminum

Elbow Data

Trade Size		Approx Wt Per 100 Pieces		Nominal Dimensions						Part Number
U.S.	Metric	lb	kg	A		B		C		
				in	mm	in	mm	in	mm	
1/2	16	29.0	13.2	4.00	101.6	6.50	165.1	2.50	63.5	3-012-90S
3/4	21	43.0	14.5	4.50	114.3	7.25	184.2	2.75	69.9	3-034-90S
1	27	71.0	32.2	5.75	146.1	8.38	212.7	2.88	73.0	3-100-90S
1-1/4	35	110.0	49.9	7.25	184.2	10.25	260.6	3.00	76.2	3-114-90S
1-1/2	41	153.0	69.4	8.25	209.6	11.88	301.6	3.63	92.1	3-112-90S
2	53	249.0	112.9	9.50	241.3	14.00	355.6	4.50	114.3	3-200-90S
2-1/2	63	437.0	198.2	10.50	266.7	15.75	400.1	5.25	133.4	3-212-90S
3	78	767.0	347.9	13.00	330.2	18.75	476.3	5.75	146.1	3-300-90S
3-1/2	91	1036.0	469.9	15.00	381.0	21.75	552.5	6.75	171.5	3-312-90S
4	103	1228.0	557.0	16.00	406.4	23.00	584.2	7.00	177.8	3-400-90S
5	129	2490.0	1129.5	24.00	609.6	36.00	914.4	11.00	279.4	3-500-90S
6	155	3850.0	1746.3	30.00	762.0	42.50	1079.5	12.50	317.5	3-600-90S



~ Standard radius elbows also available in 60, 30, 22 1/2, 15 and 11 1/4.

~ Special Large Radius 90° Elbows are available with up to a 60" Radius.

Rigid Aluminum Conduit Specifications

Nipple Data

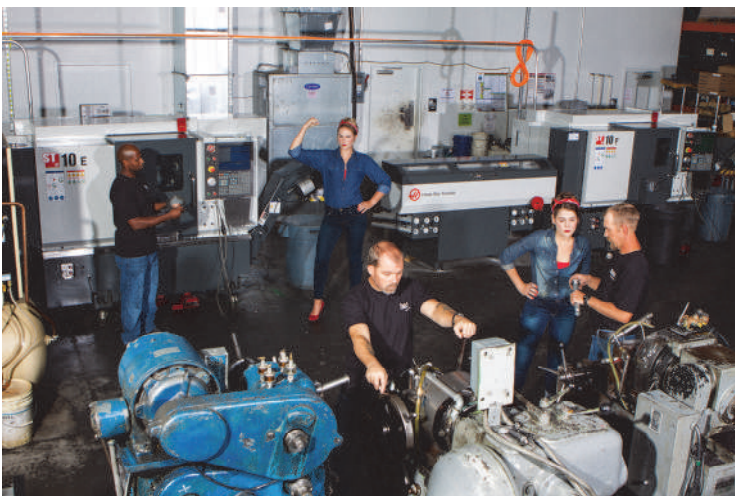
Trade Size	Close Length	CLOSE		1-1/2"		2"		2-1/2"		3"		3-1/2"	
		Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100
1/2	1-1/8"	25	2	25	3	25	4	25	5	25	6	25	7
3/4	1-3/8"	25	3	25	3	25	5	25	6	25	8	25	9
1	1-1/2"	25	5			25	7	25	9	25	12	25	14
1-1/4	1-5/8"	25	7			25	9	25	12	25	16	25	18
1-1/2	1-3/4"	25	9			25	11	25	15	25	19	25	23
2	2"	25	15					25	20	25	24	25	29
2-1/2	2-1/2"	10	28							10	33	10	40
3	2-5/8"	10	39							10	43	10	52
3-1/2	2-3/4"	10	53										
4	2-7/8"	10	60										
5	3"		80										
6	3-1/8"		117										

Trade Size	Close Length	4"		5"		6"		8"		10"		12"	
		Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100	Carton Qty	Lbs Per 100
1/2	1-1/8"	25	9	25	11	25	13	25	18	25	23	25	27
3/4	1-3/8"	25	11	25	14	25	17	25	24	25	30	25	36
1	1-1/2"	25	16	25	21	25	26	25	36	25	46	25	55
1-1/4	1-5/8"	25	22	25	28	25	33	25	45	25	59	25	72
1-1/2	1-3/4"	25	27	25	34	25	41	25	57	25	72	25	87
2	2"	25	34	25	44	25	53	25	73	25	95	25	112
2-1/2	2-1/2"	10	50	10	66	10	80	10	110	10	141	10	168
3	2-5/8"	10	67	10	87	10	100	10	137	10	176	10	210
3-1/2	2-3/4"	10	80	10	107	10	124	10	170	10	218	10	262
4	2-7/8"	5	95	5	127	5	147	2	200	2	258	2	308
5	3"				160		200		275		352		420
6	3-1/8"				220		273		375		480		573

~ Custom length nipples are available. Any length, any quantity.

Aluminum

Quick Turnaround on Custom Lengths



CNC Precision Machining



Patriot
ALUMINUM PRODUCTS



Rigid Aluminum Conduit Specifications

Specification Data

UL File #:	File # E337297
Alloy :	6063 Aluminum with Copper Content <=0.10%
Standards :	UL 6A "Standard for Electrical Rigid Metal Conduit – Aluminum, Red Brass, and Stainless Steel ANSI C80.5 (Replaces Federal Specification WWC-540C) ASTM Specification B221 CSA Standard C22.2 No. 45.2

Conduit Weight Chart

FEET	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	3-1/2"	4"	5"	6"
100	28.1	37.4	54.5	71.6	88.7	118.5	187.5	246.3	295.6	350.2	478.9	630.4
200	56.2	74.8	109.0	143.2	177.4	237.0	375.0	492.5	591.2	700.4	957.8	1,260.8
300	84.3	112.2	163.5	214.8	266.1	355.5	562.5	738.9	886.8	1,050.6	1,436.7	1,891.2
400	112.4	149.6	218.0	286.4	354.8	474.0	750.0	985.2	1,182.4	1,400.8	1,915.6	2,521.6
500	140.5	187.0	272.5	358.0	443.5	592.5	937.5	1,231.5	1,478.0	1,751.0	2,394.5	3,152.0
600	168.6	224.4	327.0	429.6	532.2	711.0	1,125.0	1,477.8	1,773.6	2,101.2	2,873.4	3,782.4
700	196.7	261.8	381.5	501.2	620.9	829.5	1,312.5	1,724.1	2,069.2	2,451.4	3,352.3	4,412.8
800	224.8	299.2	436.0	572.8	709.6	948.0	1,500.0	1,970.4	2,364.8	2,801.6	3,831.3	5,043.2
900	252.9	336.6	490.5	644.4	798.3	1,066.5	1,687.5	2,216.7	2,660.4	3,151.8	4,310.1	5,673.6
1,000	281.0	374.0	545.0	716.0	887.0	1,185.0	1,875.0	2,463.0	2,956.0	3,502.0	4,789.0	6,304.0
1,100	309.1	411.4	599.5	787.6	975.7	1,303.5	2,062.5	2,709.3	3,251.6	3,852.2	5,267.9	6,934.4
1,200	337.2	448.8	654.0	859.2	1,064.4	1,422.0	2,250.0	2,955.6	3,547.2	4,202.4	5,746.8	7,564.8
1,300	365.3	486.2	708.5	930.8	1,153.1	1,540.5	2,437.5	3,201.9	3,842.8	4,552.6	6,225.7	8,195.2
1,400	393.4	523.6	763.0	1,002.4	1,241.8	1,659.0	2,625.0	3,448.2	4,138.4	4,902.8	6,704.6	8,825.6
1,500	421.5	561.0	817.5	1,074.0	1,330.5	1,777.5	2,812.5	3,694.5	4,434.0	5,253.0	7,183.5	9,456.0
1,600	449.6	598.4	872.0	1,145.6	1,419.2	1,896.0	3,000.0	3,940.8	4,729.6	5,603.2	7,662.4	10,086.4
1,700	477.7	635.8	926.5	1,217.2	1,507.9	2,014.5	3,187.5	4,187.1	5,025.2	5,953.4	8,141.3	10,716.8
1,800	505.8	673.2	981.0	1,288.8	1,596.0	2,133.0	3,375.0	4,433.4	5,320.8	6,303.6	8,620.2	11,347.2
1,900	533.9	710.6	1,035.5	1,360.4	1,685.3	2,251.5	3,562.5	4,679.7	5,616.4	6,653.8	9,099.1	11,977.6
2,000	582.0	748.0	1,090.0	1,432.0	1,774.0	2,370.0	3,750.0	4,926.0	5,912.0	7,004.0	9,578.0	12,608.0

Aluminum

Typical Installation Practices

- Cutting** ~ A hacksaw may be used to cut trade sizes 1/2" thru 1 1/4". Power cut-off tools are recommended for larger sizes.
- Bending** ~ Standard EMT Benders (one size larger than the size being bent) may be used for trade sizes 1/2" thru 1". Conventional Bending equipment is recommended for larger sizes.
- Threading** ~ Sharp dies and conventional cutting oil are recommended. Contact Customer Service for a list of recommended "Aluminum-Specific" Cutting lubricants.
- Fittings** ~ Aluminum fittings are recommended, however galvanized fittings may be used for most installations.
- Fishing & Wire Pulling** ~ For trade sizes 1/2" thru 1 1/2", and on runs <100 feet, polyethylene fish tapes or speedometer type steel cables may be used. Avoid the use of flat steel tapes. For trade sizes 2" and above, and on runs >100 feet, polypropylene rope is recommended.
- Soil or Concrete Installation** ~ UL's Electrical Construction Equipment Directory (UL Green Book) states that supplementary corrosion protection is required for aluminum conduit used in concrete or in contact with soil. Supplementary protection examples include paints (bitumastic) or wraps approved for the purpose, or PVC coated aluminum conduit.

Join the New Industrial Revolution™



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 Stainless - E337297
 Galvanized - E467496
 EMT - E467495