



The **GREEN** Solution for Utility Poles  
Made from Recycled Materials,  
100% Recyclable.

# Ductile Iron Poles

An Engineered Product.



An Engineered Solution.

POLES

## A groundbreaking alternative to conventional distribution poles.

If you're unhappy with the consistency and durability of wood poles and need an engineered option, McWane Ductile Iron Poles are the perfect solution. Our durable, eco-friendly poles are a groundbreaking alternative to conventional distribution poles.

### Why Use Ductile Iron Poles?

- **DURABILITY** - Our ductile iron poles are highly corrosion resistant and have an extended service life.
- **LOW MAINTENANCE** - Strong, lightweight, and corrosion resistant, McWane poles are not affected by rot, insects, freezing weather, or woodpeckers.
- **CONSISTENT STRENGTH** - Unlike wood, our ductile iron poles are engineered with a minimum yield strength of 42 ksi.
- **LOW INVESTMENT** - With our life cycle advantages and low product cost, ductile iron poles are the most cost effective engineered structures in use.
- **GREEN SOLUTION** - Our poles are composed of recycled materials and can be recycled after the end of their long service life.
- **SIMPLE INSTALLATION** - Ductile iron poles can be easily drilled, and the round, tapered design simplifies installation.

### Did You Know?

The oldest cast iron water main is in Versailles, France - installed in 1664.

Ductile iron poles are made using the same casting technology that has produced water main pipelines for over 60 years.

Ductile iron is a product of advanced metallurgy. It combines the physical strength of steel with the corrosion resistance of cast iron.

Ductile iron poles are usually less costly than steel and concrete poles.

Ductile iron poles weigh 50% less than comparable wood poles.

Ductile iron poles are environmentally friendly (GREEN) because they are made from recycled materials and are 100% recyclable.

Ductile iron poles are an exciting new option in the distribution pole industry.

McWane has been in business since 1921 and is one of the world's leading producers of products for water systems.



McWane's *patented* Ductile Iron Utility Poles are manufactured by centrifugal casting for consistent dimensional control.

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Gray Acrylic Barrier Coat  
with Arc-Applied Zinc Base Coat



Natural Finish,  
Weathered Appearance



Ceramic Epoxy Embed Coating  
Permasafe applied internally and  
externally to 1' above ground line.  
Standard on all poles

**Properties of Ductile Iron:**

Yield strength (minimum psi) \_\_\_\_\_ 42,000  
Ultimate strength (minimum psi) \_\_\_\_\_ 60,000  
Elongation (minimum %) \_\_\_\_\_ 10%  
Modulus of elasticity (ksi) \_\_\_\_\_ 25,000

**Other Information:**

Poles pre-drilled to your specification and easily field drilled.  
Rivet nut grounding supplied at neutral and 6" above ground line.

**Coating Options:**

**Embed section:**

- 1. Ceramic Epoxy embed coating. Full coating from base to 1' above ground line internally and externally giving the embedded pole section superior protection.

**Above ground:**

- 1. Natural Finish, Weathered Appearance.
- 2. Metalized zinc base coat with gray acrylic barrier coat above grade, exterior only.
- 3. Other color options available for large quantity orders.

**Designed to Wood Pole Equivalency  
Grade 'B' Construction**

Our engineered structures have been load tested and verified by third party agencies. Test data available upon request.



McWane Poles are  
Proudly Made in the USA.



*"Did you know that our ceramic epoxy embed coating is designed for corrosive environments? This ductile iron coating, brand name PermaSafe™, has had a perfect performance record in highly corrosive environments for over thirty years."*



Load bearing plate with standard embed coating



Poles are topped with **HDPE caps**, **flat caps** or **raptor caps**.  
Ductile Iron Caps are also available.



Poles are **pre-drilled** to your specification and can be **easily drilled in the field**.



Poles have **press-fit joints** which are loaded in a hydraulic press and pinned with a mechanical fitting.

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**Grounded Pole**



**Dead Ends & Angles**



**Grounding Rivet Nut**



**Optional Grounding Plates**

# Ductile Iron Utility Pole Technical Information

All poles designed to wood pole equivalency, grade "B" construction.

## Class H III

Length	Part Number	Truck Load Quantity	Standard Weight (lb)	Tip Diameter (inches)	Base Diameter (inches)	Minimum Ground Line Capacity (ft-kips)	Embed Depth (feet)
30'	H330	30	1136	8.7	13.9	112.1	5.5
35'	H335	27	1341	8.7	14.4	134.1	6.0
40'	H340	21	1685	8.7	15.3	156.0	6.0
45'	H345	18	1938	8.7	16.3	177.9	6.5
50'	H350	15	2207	8.7	17.2	199.9	7.0
55'	H355	12	2600	8.7	17.7	221.8	7.5
60'	H360	10	2893	8.7	18.7	243.7	8.0
65'	H365	8	3200	8.7	19.6	265.7	8.5

## Class H II

Length	Part Number	Truck Load Quantity	Standard Weight (lb)	Tip Diameter (inches)	Base Diameter (inches)	Minimum Ground Line Capacity (ft-kips)	Embed Depth (feet)
30'	H230	30	1038	8.7	13.9	95.7	5.5
35'	H235	30	1226	8.7	14.4	114.4	6.0
40'	H240	23	1540	8.7	15.3	133.4	6.0
45'	H245	20	1771	8.7	16.3	151.8	6.5
50'	H250	17	2017	8.7	17.2	170.6	7.0
55'	H255	13	2376	8.7	17.7	189.3	7.5
60'	H260	11	2643	8.7	18.7	208.0	8.0
65'	H265	10	2924	8.7	19.6	226.7	8.5

## Class H I

Length	Part Number	Truck Load Quantity	Standard Weight (lb)	Tip Diameter (inches)	Base Diameter (inches)	Minimum Ground Line Capacity (ft-kips)	Embed Depth (feet)
30'	H130	30	842	8.7	13.9	80.7	5.5
35'	H135	30	994	8.7	14.4	96.5	6.0
40'	H140	25	1248	8.7	15.3	112.3	6.0
45'	H145	25	1436	8.7	16.3	128.1	6.5
50'	H150	20	1634	8.7	17.2	143.9	7.0
55'	H155	15	1925	8.7	17.7	159.7	7.5
60'	H160	14	2141	8.7	18.7	175.5	8.0
65'	H165	12	2368	8.7	19.6	191.3	8.5

The part number will include either "W" for weathered appearance or "G" for gray acrylic, barrier coat.

## Class I

Length	Part Number	Truck Load Quantity	Standard Weight (lb)	Tip Diameter (inches)	Base Diameter (inches)	Minimum Ground Line Capacity (ft-kips)	Embed Depth (feet)
30'	C130	42	776	6.0	11.2	67.2	5.5
35'	C135	40	939	6.0	11.6	80.4	6.0
40'	C140	32	1172	6.0	12.6	93.6	6.0
45'	C145	27	1362	6.0	13.5	106.8	6.5
50'	C150	23	1567	6.0	14.5	119.9	7.0
55'	C155	17	1857	6.0	15.0	133.1	7.5
60'	C160	15	2083	6.0	15.9	146.3	8.0
65'	C165	13	2373	6.0	16.9	159.4	8.5
70'	C170	10	2680	6.0	17.4	172.6	9.0

## Class II

Length	Part Number	Truck Load Quantity	Standard Weight (lb)	Tip Diameter (inches)	Base Diameter (inches)	Minimum Ground Line Capacity (ft-kips)	Embed Depth (feet)
30'	C230	42	630	6.0	11.2	55.3	5.5
35'	C235	42	762	6.0	11.7	66.1	6.0
40'	C240	36	951	6.0	12.7	76.9	6.0
45'	C245	32	1105	6.0	13.6	87.8	6.5
50'	C250	25	1271	6.0	14.6	98.6	7.0
55'	C255	21	1506	6.0	15.1	109.4	7.5
60'	C260	18	1689	6.0	16.0	120.3	8.0
65'	C265	17	1883	6.0	17.0	131.1	8.5
70'	C270	14	2172	6.0	17.5	141.9	9.0

## Class III

Length	Part Number	Truck Load Quantity	Standard Weight (lb)	Tip Diameter (inches)	Base Diameter (inches)	Minimum Ground Line Capacity (ft-kips)	Embed Depth (feet)
30'	C330	42	563	6.0	11.3	44.9	5.5
35'	C335	42	673	6.0	11.9	53.6	6.0
40'	C340	36	853	6.0	12.8	62.4	6.0
45'	C345	35	990	6.0	13.8	71.1	6.5
50'	C350	30	1138	6.0	14.4	79.9	7.0
55'	C355	24	1350	6.0	15.3	88.7	7.5
60'	C360	21	1513	6.0	16.3	97.5	8.0
65'	C365	19	1685	6.0	17.2	106.2	8.5
70'	C370	15	1941	6.0	17.8	115.0	9.0

### Patented Product Identification

U.S. Pat. No. 8,186,421; U.S. Patent No: D629,531; U.S. Patent No: D624667; U.S. Patent No: D617471



**Transition out of Substations**



**Lighting Poles  
& Custom Colors**



**Corrosive Environments & Coastal Areas**

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**POLES**





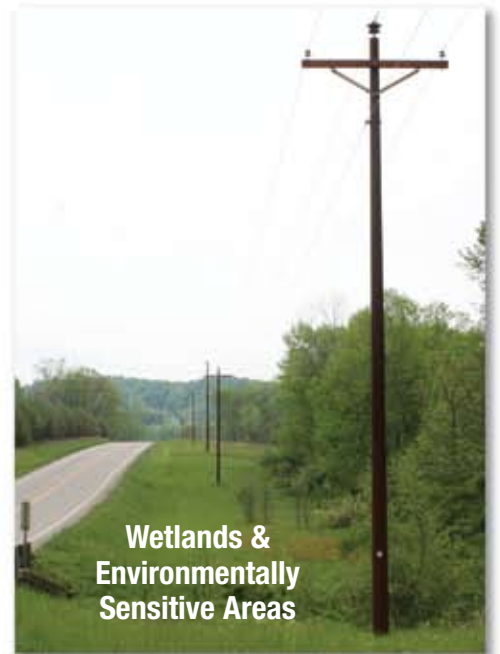
**69KV Applications**



**Class II 45' Riser Pole**



**Double Circuit Applications**



**Wetlands &  
Environmentally  
Sensitive Areas**

**McWane Ductile Iron Poles are ideal  
for these types of installations and many others.**

McWane Ductile Iron Poles can fill all your distribution pole needs. Consider us for special applications such as, transmission underbuild, dead end poles, angle poles, riser poles, self supporting poles and substation transition poles.

# Performance Characteristics of Ductile Iron Utility Poles

All poles are designed to wood pole equivalency, grade "B" construction.

Tip Load, Minimum Capacity, Lbs Applied 2 Feet From Tip							
Length	Class IV	Class III	Class II	Class I	Class H I	Class H II	Class H III
30'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
35'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
40'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
45'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
50'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
55'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
60'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
65'	1,560	1,950	2,405	2,925	3,510	4,160	4,875
70'	NA	1,950	2,405	2,925	NA	NA	NA
	*	*	*	**	**	**	**

Bending Moment, Minimum Capacity, Lbs-Ft Ground Level							
Length	Class IV	Class III	Class II	Class I	Class H I	Class H II	Class H III
30'	35,880	44,850	55,315	67,275	80,730	95,680	112,125
35'	42,900	53,625	66,138	80,438	96,525	114,400	134,063
40'	49,920	62,400	76,960	93,600	112,320	133,120	156,000
45'	56,940	71,175	87,783	106,763	128,115	151,840	177,938
50'	63,960	79,950	98,605	119,925	143,910	170,560	199,875
55'	70,980	88,725	109,428	133,088	159,705	189,280	221,813
60'	78,000	97,500	120,250	146,250	175,500	208,000	243,700
65'	85,020	106,275	131,073	159,413	191,295	226,700	265,700
70'	NA	115,050	141,895	172,575	NA	NA	NA
	*	*	*	**	**	**	**

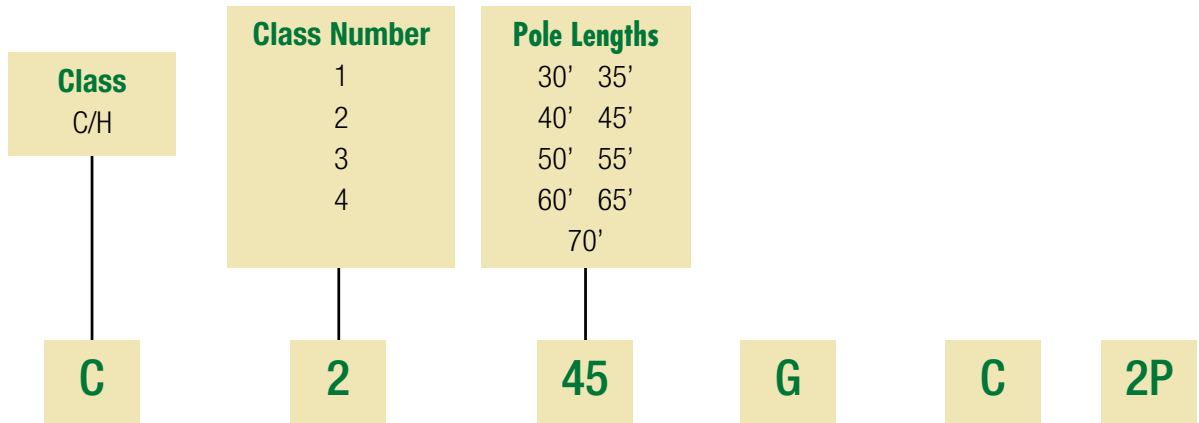
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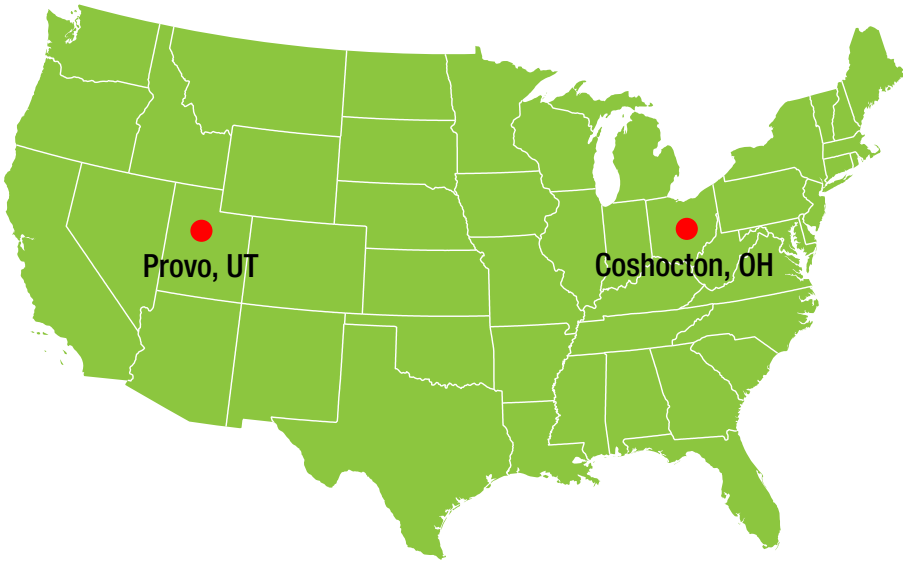
# Part Number Logic



**Finish**  
**W** = Weathered finish.  
**G** = Gray acrylic top coat on arc-applied zinc base coat.  
**X** = Extreme Environment Coating – Gray acrylic top coat on heavy duty zinc base.  
**C** = Custom color acrylic.  
 All poles have a ceramic epoxy embed coating from 1' above ground line to pole base, inside and out.

Two Piece Pole Option

**Cap Type**  
**C**= HDPE Flat Cap  
**R**=HDPE Raptor Cap  
**D**= Ductile Cap



McWane Poles are manufactured in Coshocton, OH and Provo, UT.

All holes require drawing approval. Pole finish and number of holes must be designated at the time of order. Poles are equipped with a cap and bearing plate. Poles are press-fitted and pinned.

Please include the required number of holes as a separate line item or in the product description on the purchase order.

NEETRAC testing verified that McWane's *patented* Ductile Iron Poles meet and exceed the load requirements.

Third party conductivity tests on a 40' ductile iron coated pole resulted in 2,000 micro-ohms impedance, which is equivalent to the resistance of a 4/0 copper ground.

## ENGINEERED STRENGTH

The story of McWane Poles comes down to this - we have taken an engineered, tested, and perfected standard water industry product, Ductile Iron Pipe, and stood it on its head. Literally. Now, Ductile Iron Poles are standing tall in the electrical utility industry.

Our patented manufacturing process allows for McWane Ductile Iron Poles to offer engineered strength, dimensional consistency, and natural corrosion resistance. Our poles are impervious to rot, insects, woodpeckers, and are highly fire resistant. Thanks to their lighter weight, McWane Ductile Iron Poles are also less expensive to transport and install. On top of these benefits, we offer a truly GREEN product that is made from recycled material and 100% recyclable. All of this adds up to McWane Ductile Iron Poles being the best overall value in the utility pole market.

Don't just take our word for it. Since 2008, more than 150 utilities in 25 different states have bought into the benefits of Ductile Iron Poles. We have been included in RUS, FEMA, and numerous states DOT funded projects. These utilities see that the advantages of McWane Ductile Iron Poles. Give McWane Poles a try, and soon you will be joining the growing list of satisfied customers.

McWane Inc. has been offering excellence in manufacturing and customer service since 1921.

Visit our website at [www.mcwanepoles.com](http://www.mcwanepoles.com) for more information.

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McWane Poles are manufactured in ISO 9001 facilities.