

PVC Conduit and Fittings

The Right People, The Right Products, The Right Places

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Atkore[™]
Heritage
Plastics

Building better together.

As the leader in infrastructure solutions, Atkore has brought together the brands that you've trusted for years, allowing us to better partner with those who are building what's next.



Allied Tube & Conduit ▲ AFC Cable Systems ▲ Heritage Plastics ▲ Unistrut ▲ Unistrut Construction ▲ Cope
US Tray ▲ Calbrite ▲ Calbond ▲ Kaf-Tech ▲ Columbia-MBF ▲ Eastern Wire + Conduit ▲ ACS/Uni-Fab ▲ Cii
Power-Strut ▲ Calconduit ▲ Razor Ribbon ▲ Calpipe Security ▲ Vergokan ▲ Flexicon ▲ Marco

Learn more at atkore.com

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Atkore is forging a future where our employees, customers, suppliers, shareholders and communities are building better together – a future focused on serving the customer and powering and protecting the world.

With approximately 3,900 employees and 67 manufacturing and distribution facilities worldwide, Atkore is a leading provider of electrical, safety and infrastructure solutions.

Our Mission

To be the customer's first choice by providing unmatched quality, delivery and value based on sustainable excellence in strategy, people and processes.

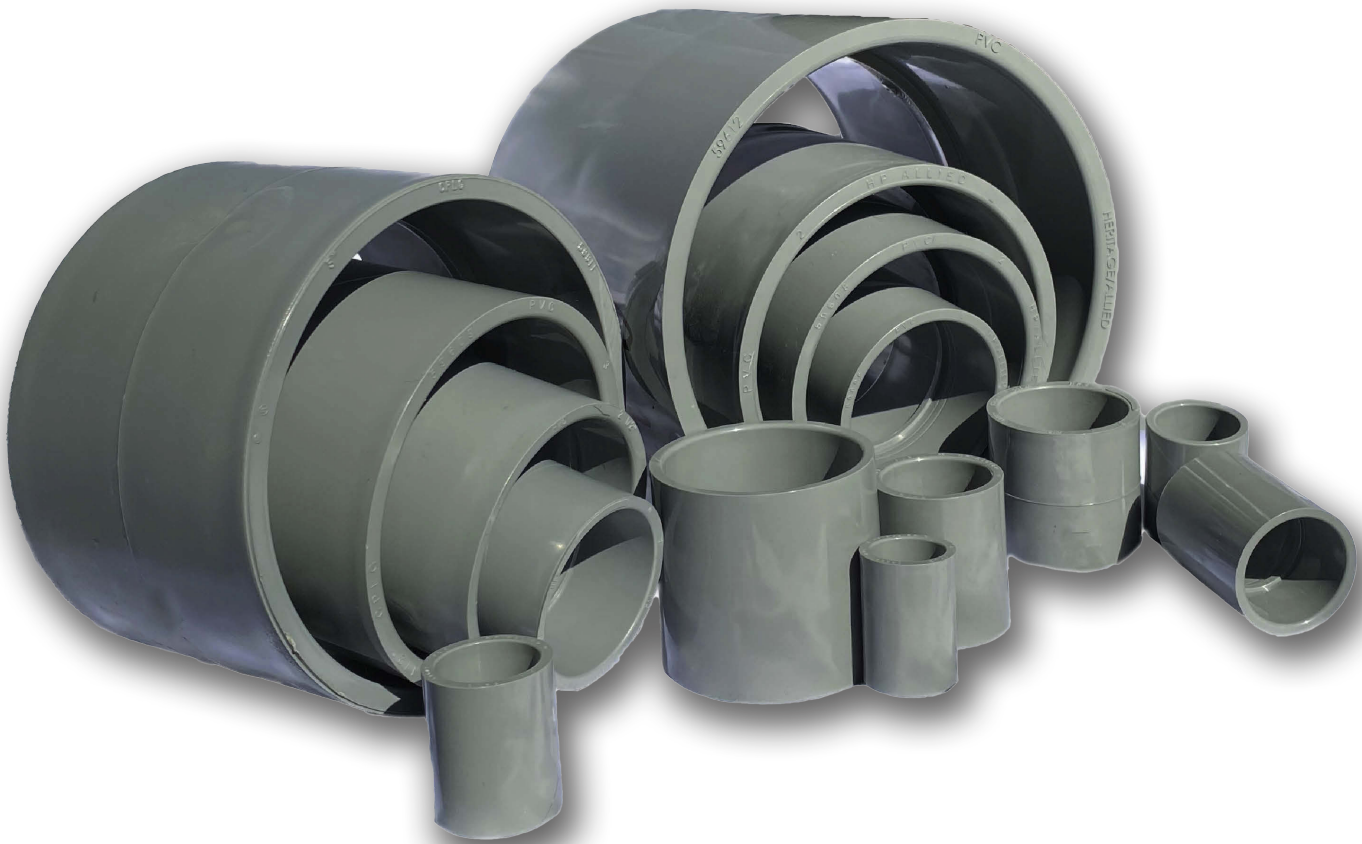


About Heritage

Heritage Plastics offers a complete line of rigid PVC conduit, utility duct and fittings. We have an extensive national manufacturing network in the industry which enables us to best serve our customers.

Our products have proven durable and effective for years of maintenance free performance in underground, encased and exposed applications. Heritage Plastics is vigilant about high quality and innovation to bring our customers the top products on the market.

The right people, the right products, the right places



Special orders are non cancelable, refundable or returnable



What are typical applications?

- Commercial and Industrial
- Transportation and Highway
- Airports and Marinas
- Cable, Data and Communication Lines
- Utilities

What are advantages of PVC Pipe?

- Corrosion Resistant
- Long Life
- Impact Resistant
- Labor Savings
- Lightweight
- Non Magnetic
- Self Extinguishing
- Non Galvanic



What determines the need for Schedule 80 conduit as opposed to Schedule 40?

In alignment with NEMA TC-2 and NEC, Section 352.10 (F), Schedule 40 and 80 can both be used in standard underground and above ground applications. Schedule 80 is designed for heavy duty applications above ground, where there are areas of potential physical damage.

Are Schedule 80 and 40 electrical conduit and fabricated fittings suited for direct sunlight?

Schedule 40 and 80 conduit and fabricated fittings are “Sunlight Resistant” in accordance with UL 651. Refer to the Atkore Sunlight Exposure Technical Bulletin on the website for additional information.

For more frequently asked questions please visit our literature web page!

atkore.com/heritageplastics/literature

Additional Website Resources

- Technical Resources
- Product Specification Sheets
- East and West truck loading charts
- New product releases and company updates

Physical Properties and Part Number Guide

Physical Properties of PVC

| Property | Unit | Value |
|---|-------------------------------|------------------------|
| Physical | | |
| Specific Gravity | -- | 1.4 - 1.6 |
| Tensile Strength | psi | 5,000 - 7,000 |
| Compressive Strength | psi | 8,500 - 9,000 |
| Flexural Strength | psi | 11,000 - 12,000 |
| Tensile Modulus | psi | 400,000 - 500,000 |
| Izod Impact Strength | [ft-lb] / inch of notch | 0.65 |
| Hardness | Durometer D | 77 |
| Thermal | | |
| Coefficient of Linear Thermal Expansion | in/(in-°F) | 3.0 x 10 ⁻⁵ |
| Deflection Temperature Under Load (264 psi) | °F | 140 - 158 |
| Thermal Conductivity | BTU-in/hr-ft ² -°F | 1.0 - 1.3 |
| Electrical | | |
| Dielectric Strength | Volts per mil | 1,100 |
| Other | | |
| Water Absorption | % max in 24 hrs at 72 °F | 0.5% |
| Flammability | -- | Self-extinguishing |

Note: Values shown are approximate (typical) and are provided for informational use only

Part Number Guide

| Rigid PVC Pipe | Fittings | Fittings - Elbows |
|---|--|--|
| <p>Schedule 40 ½-inch 10' Conduit</p> <p>4005010</p> <p>Schedule Trade Size Length in Feet</p> | <p>4" Coupling</p> <p>CP40</p> <p>Product Trade Size</p> | <p>Schedule 40 2" x 90 x 36" Plain End Special Radius Elbow F402009036P</p> <p>F402009036P</p> <p>Schedule Trade Size Degree Radius Plain End</p> |

Schedule 40 and 80 Rigid PVC Conduit



Rated for use with 90 degree C wiring
Sunlight resistant per UL 651
Conforms to UL 651 and NEMA TC 2

| Trade Size | Part Number | | Dimensions (in) | | Crate Quantity (ft) | |
|--------------------|-------------|---------|--------------------------|------------------------|---------------------|---------|
| | 10 Foot | 20 Foot | Average Outside Diameter | Minimum Wall Thickness | 10 Foot | 20 Foot |
| Schedule 40 | | | | | | |
| ½ | 4005010 | 4005020 | 0.840 | 0.109 | 6,000 | 12,000 |
| ¾ | 4007510 | 4007520 | 1.050 | 0.113 | 4,400 | 8,800 |
| 1 | 4010010 | 4010020 | 1.315 | 0.133 | 3,600 | 7,200 |
| 1¼ | 4012510 | 4012520 | 1.660 | 0.140 | 3,300 | 6,600 |
| 1½ | 4015010 | 4015020 | 1.900 | 0.145 | 2,250 | 4,500 |
| 2 | 4020010 | 4020020 | 2.375 | 0.154 | 1,400 | 2,800 |
| 2½ | 4025010 | 4025020 | 2.875 | 0.203 | 930 | 1,860 |
| 3 | 4030010 | 4030020 | 3.500 | 0.216 | 880 | 1,760 |
| 3½ | 4035010 | 4035020 | 4.000 | 0.226 | 630 | 1,260 |
| 4 | 4040010 | 4040020 | 4.500 | 0.237 | 570 | 1,140 |
| 5 | 4050010 | 4050020 | 5.563 | 0.258 | 380 | 760 |
| 6 | 4060010 | 4060020 | 6.625 | 0.280 | 260 | 520 |
| 8* | 4080010 | 4080020 | 8.625 | 0.322 | 140 | 280 |
| Schedule 80 | | | | | | |
| ½ | 8005010 | 8005020 | 0.840 | 0.147 | 6,000 | 12,000 |
| ¾ | 8007510 | 8007520 | 1.050 | 0.154 | 4,400 | 8,800 |
| 1 | 8010010 | 8010020 | 1.315 | 0.179 | 3,600 | 7,200 |
| 1¼ | 8012510 | 8012520 | 1.660 | 0.191 | 3,300 | 6,600 |
| 1½ | 8015010 | 8015020 | 1.900 | 0.200 | 2,250 | 4,500 |
| 2 | 8020010 | 8020020 | 2.375 | 0.218 | 1,400 | 2,800 |
| 2½ | 8025010 | 8025020 | 2.875 | 0.276 | 930 | 1,860 |
| 3 | 8030010 | 8030020 | 3.500 | 0.300 | 880 | 1,760 |
| 3½ | 8035010 | 8035020 | 4.000 | 0.318 | 630 | 1,260 |
| 4 | 8040010 | 8040020 | 4.500 | 0.337 | 570 | 1,140 |
| 5 | 8050010 | 8050020 | 5.563 | 0.375 | 380 | 760 |
| 6 | 8060010 | 8060020 | 6.625 | 0.432 | 260 | 520 |
| 8* | 8080010 | 8080020 | 8.625 | 0.500 | 140 | 280 |

*8 inch products are not included in UL 651 and are therefore not certified by ETL
Product availability varies by region and minimum run quantities may apply



Utility Duct Rigid PVC Conduit

| Trade Size | Part Number 20 Foot | Dimensions (in) | | Crate Quantity (ft) |
|---------------|------------------------|-----------------------------|---------------------------|------------------------|
| | | Average Outside Diameter | Minimum Wall Thickness | |
| DB-60 | | | | |
| 2 | 6020020 | 2.375 | 0.060 | 2,800 |
| 3 | 6030020 | 3.500 | 0.092 | 1,760 |
| 4 | 6040020 | 4.500 | 0.121 | 1,140 |
| 5 | 6050020 | 5.563 | 0.152 | 760 |
| 6 | 6060020 | 6.625 | 0.182 | 520 |
| DB-100 | | | | |
| 3 | 1030020 | 3.500 | 0.112 | 1,760 |
| 4 | 1040020 | 4.500 | 0.145 | 1,140 |
| 5 | 1050020 | 5.563 | 0.179 | 760 |
| 6 | 1060020 | 6.625 | 0.213 | 520 |
| DB-120 | | | | |
| 1 | 1210020 | 1.315 | 0.060 | 7,200 |
| 1½ | 1215020 | 1.900 | 0.060 | 4,500 |
| 2 | 1220020 | 2.375 | 0.077 | 2,800 |
| 3 | 1230020 | 3.500 | 0.118 | 1,760 |
| 4 | 1240020 | 4.500 | 0.154 | 1,140 |
| 5 | 1250020 | 5.563 | 0.191 | 760 |
| 6 | 1260020 | 6.625 | 0.227 | 520 |

If you don't see the product you require, please call for availability
 Product availability varies by region and minimum run quantities may apply
 Conforms to NEMA TC 6 & 8 and ASTM F 512



Utility/C-Duct Rigid PVC Conduit

| Trade Size | Part Number 20 Foot | Dimensions (in) | | Crate Quantity (ft) |
|--------------|------------------------|-----------------------------|---------------------------|------------------------|
| | | Average Outside Diameter | Minimum Wall Thickness | |
| EB-20 | | | | |
| 3 | 2030020 | 3.500 | 0.061 | 1,760 |
| 4 | 2040020 | 4.500 | 0.082 | 1,140 |
| 5 | 2050020 | 5.563 | 0.103 | 760 |
| 6 | 2060020 | 6.625 | 0.125 | 520 |
| EB-35 | | | | |
| 3 | 3530020 | 3.500 | 0.076 | 1,760 |
| 4 | 3540020 | 4.500 | 0.100 | 1,140 |
| 5 | 3550020 | 5.563 | 0.126 | 760 |
| 6 | 3560020 | 6.625 | 0.152 | 520 |

Product availability varies by region and minimum run quantities may apply
EB products conform to NEMA TC 6 & 8 and ASTM F 512

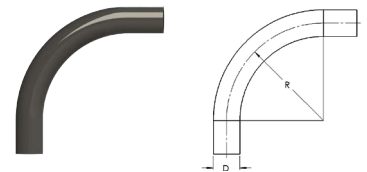
| Trade Size | Part Number 20 Foot | Dimensions (in) | | Crate Quantity (ft) |
|---------------|------------------------|-----------------------------|---------------------------|------------------------|
| | | Average Outside Diameter | Minimum Wall Thickness | |
| C-Duct | | | | |
| 4 (white) | 9040020WHT | 4.350 | 0.140 | 1,260 |
| 4 (gray) | 9040020 | 4.350 | 0.140 | 1,260 |

C-Duct compliance with CAO-8546 varies by region

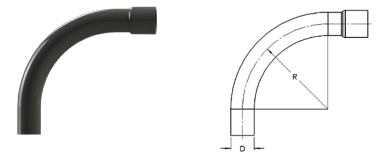


Schedule 40 Standard Radius Elbows

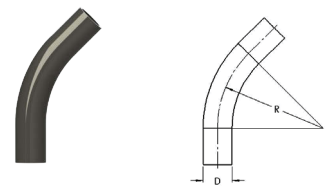
| Trade Size | Part Number | | Dimensions (in) | | Package Quantity |
|------------|-------------|----------|-----------------------------|----------|------------------|
| | Plain End | Bell End | Average Outside Diameter, D | Radius R | |
| 90° | | | | | |
| 1/2 | F4005090P | F4005090 | 0.840 | 4.00 | 50 |
| 3/4 | F4007590P | F4007590 | 1.050 | 4.50 | 25 |
| 1 | F4010090P | F4010090 | 1.315 | 5.75 | 25 |
| 1 1/4 | F4012590P | F4012590 | 1.660 | 7.25 | 25 |
| 1 1/2 | F4015090P | F4015090 | 1.900 | 8.25 | 25 |
| 2 | F4020090P | F4020090 | 2.375 | 9.50 | 25 |
| 2 1/2 | F4025090P | F4025090 | 2.875 | 10.50 | 50 |
| 3 | F4030090P | F4030090 | 3.500 | 13.00 | 50 |
| 3 1/2 | F4035090P | F4035090 | 4.000 | 15.00 | 25 |
| 4 | F4040090P | F4040090 | 4.500 | 16.00 | 25 |
| 5 | F4050090P | F4050090 | 5.563 | 24.00 | 20 |
| 6 | F4060090P | F4060090 | 6.625 | 30.00 | 16 |
| 45° | | | | | |
| 1/2 | F4005045P | F4005045 | 0.840 | 4.00 | 50 |
| 3/4 | F4007545P | F4007545 | 1.050 | 4.50 | 25 |
| 1 | F4010045P | F4010045 | 1.315 | 5.75 | 25 |
| 1 1/4 | F4012545P | F4012545 | 1.660 | 7.25 | 25 |
| 1 1/2 | F4015045P | F4015045 | 1.900 | 8.25 | 25 |
| 2 | F4020045P | F4020045 | 2.375 | 9.50 | 25 |
| 2 1/2 | F4025045P | F4025045 | 2.875 | 10.50 | 50 |
| 3 | F4030045P | F4030045 | 3.500 | 13.00 | 50 |
| 3 1/2 | F4035045P | F4035045 | 4.000 | 15.00 | 25 |
| 4 | F4040045P | F4040045 | 4.500 | 16.00 | 25 |
| 5 | F4050045P | F4050045 | 5.563 | 24.00 | 20 |
| 6 | F4060045P | F4060045 | 6.625 | 30.00 | 16 |



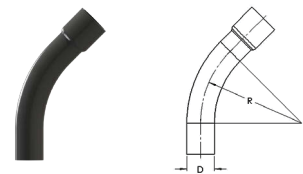
90° Plain End



90° Bell End



45° Plain End

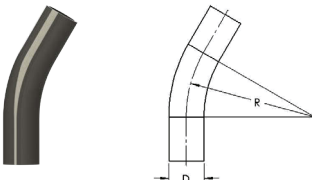
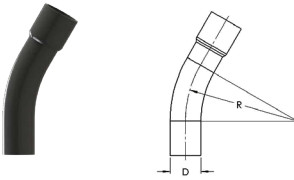
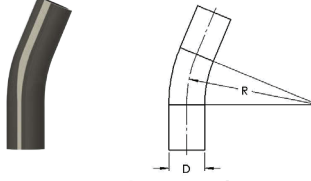
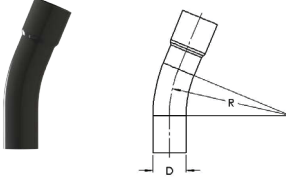


45° Bell End

Product availability varies by region and minimum run quantities may apply
Listed to UL 651



Schedule 40 Standard Radius Elbows

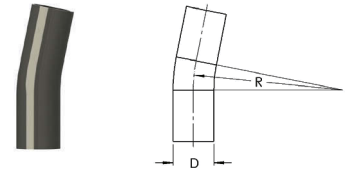
| | Trade Size | Part Number | | Dimensions (in) | | Package Quantity |
|---|-------------|-------------|----------|-----------------------------|----------|------------------|
| | | Plain End | Bell End | Average Outside Diameter, D | Radius R | |
| 30° | | | | | | |
|  <p>30° Plain End</p> | 3/4 | F4007530P | F4007530 | 1.050 | 4.50 | 25 |
| | 1 | F4010030P | F4010030 | 1.315 | 5.75 | 25 |
| | 1¼ | F4012530P | F4012530 | 1.660 | 7.25 | 25 |
| | 1½ | F4015030P | F4015030 | 1.900 | 8.25 | 25 |
| | 2 | F4020030P | F4020030 | 2.375 | 9.50 | 25 |
| | 2½ | F4025030P | F4025030 | 2.875 | 10.50 | 20 |
|  <p>30° Bell End</p> | 3 | F4030030P | F4030030 | 3.500 | 13.00 | 50 |
| | 3½ | F4035030P | F4035030 | 4.000 | 15.00 | 25 |
| | 4 | F4040030P | F4040030 | 4.500 | 16.00 | 25 |
| | 5 | F4050030P | F4050030 | 5.563 | 24.00 | 20 |
| | 6 | F4060030P | F4060030 | 6.625 | 30.00 | 16 |
| | 22½° | | | | | |
|  <p>22½° Plain End</p> | 3/4 | F4007522P | F4007522 | 1.050 | 4.50 | 25 |
| | 1 | F4010022P | F4010022 | 1.315 | 5.75 | 25 |
| | 1¼ | F4012522P | F4012522 | 1.660 | 7.25 | 25 |
| | 1½ | F4015022P | F4015022 | 1.900 | 8.25 | 25 |
| | 2 | F4020022P | F4020022 | 2.375 | 9.50 | 25 |
| | 2½ | F4025022P | F4025022 | 2.875 | 10.50 | 20 |
|  <p>22½° Bell End</p> | 3 | F4030022P | F4030022 | 3.500 | 13.00 | 50 |
| | 3½ | F4035022P | F4035022 | 4.000 | 15.00 | 25 |
| | 4 | F4040022P | F4040022 | 4.500 | 16.00 | 25 |
| | 5 | F4050022P | F4050022 | 5.563 | 24.00 | 20 |
| | 6 | F4060022P | F4060022 | 6.625 | 30.00 | 16 |

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Listed to UL 651

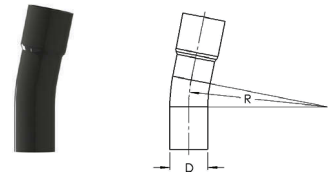


Schedule 40 Standard Radius Elbows

| Trade Size | Part Number | | Dimensions (in) | | Package Quantity |
|-------------|-------------|----------|-----------------------------|----------|------------------|
| | Plain End | Bell End | Average Outside Diameter, D | Radius R | |
| 11¼° | | | | | |
| ¾ | F4007511P | F4007511 | 1.050 | 4.50 | 25 |
| 1 | F4010011P | F4010011 | 1.315 | 5.75 | 25 |
| 1¼ | F4012511P | F4012511 | 1.660 | 7.25 | 25 |
| 1½ | F4015011P | F4015011 | 1.900 | 8.25 | 25 |
| 2 | F4020011P | F4020011 | 2.375 | 9.50 | 25 |
| 2½ | F4025011P | F4025011 | 2.875 | 10.50 | 20 |
| 3 | F4030011P | F4030011 | 3.500 | 13.00 | 50 |
| 3½ | F4035011P | F4035011 | 4.000 | 15.00 | 25 |
| 4 | F4040011P | F4040011 | 4.500 | 16.00 | 25 |
| 5 | F4050011P | F4050011 | 5.563 | 24.00 | 20 |
| 6 | F4060011P | F4060011 | 6.625 | 30.00 | 16 |



11¼° Plain End

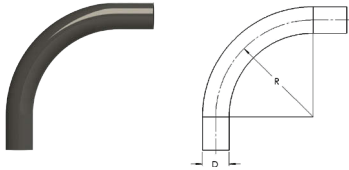
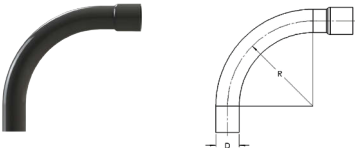
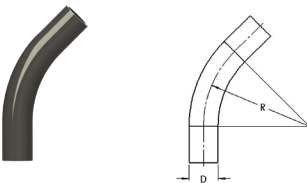
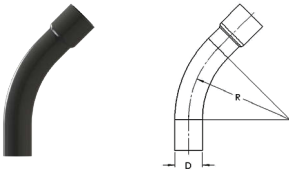


11¼° Bell End

Product availability varies by region and minimum run quantities may apply
Listed to UL 651



Schedule 80 Standard Radius Elbows

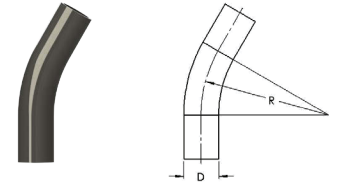
| | Trade Size | Part Number | | Dimensions (in) | | Package Quantity |
|--|------------|-------------|----------|-----------------------------|----------|------------------|
| | | Plain End | Bell End | Average Outside Diameter, D | Radius R | |
| 90° | | | | | | |
|  <p>90° Plain End</p>  <p>90° Bell End</p> | 1/2 | F8005090P | F8005090 | 0.840 | 4.00 | 50 |
| | 3/4 | F8007590P | F8007590 | 1.050 | 4.50 | 25 |
| | 1 | F8010090P | F8010090 | 1.315 | 5.75 | 25 |
| | 1 1/4 | F8012590P | F8012590 | 1.660 | 7.25 | 25 |
| | 1 1/2 | F8015090P | F8015090 | 1.900 | 8.25 | 25 |
| | 2 | F8020090P | F8020090 | 2.375 | 9.50 | 25 |
| | 2 1/2 | F8025090P | F8025090 | 2.875 | 10.50 | 50 |
| | 3 | F8030090P | F8030090 | 3.500 | 13.00 | 50 |
| | 3 1/2 | F8035090P | F8035090 | 4.000 | 15.00 | 25 |
| | 4 | F8040090P | F8040090 | 4.500 | 16.00 | 25 |
| | 5 | F8050090P | F8050090 | 5.563 | 24.00 | 20 |
| | 6 | F8060090P | F8060090 | 6.625 | 30.00 | 16 |
| 45° | | | | | | |
|  <p>45° Plain End</p>  <p>45° Bell End</p> | 1/2 | F8005045P | F8005045 | 0.840 | 4.00 | 50 |
| | 3/4 | F8007545P | F8007545 | 1.050 | 4.50 | 25 |
| | 1 | F8010045P | F8010045 | 1.315 | 5.75 | 25 |
| | 1 1/4 | F8012545P | F8012545 | 1.660 | 7.25 | 25 |
| | 1 1/2 | F8015045P | F8015045 | 1.900 | 8.25 | 25 |
| | 2 | F8020045P | F8020045 | 2.375 | 9.50 | 25 |
| | 2 1/2 | F8025045P | F8025045 | 2.875 | 10.50 | 50 |
| | 3 | F8030045P | F8030045 | 3.500 | 13.00 | 50 |
| | 3 1/2 | F8035045P | F8035045 | 4.000 | 15.00 | 25 |
| | 4 | F8040045P | F8040045 | 4.500 | 16.00 | 25 |
| | 5 | F8050045P | F8050045 | 5.563 | 24.00 | 20 |
| | 6 | F8060045P | F8060045 | 6.625 | 30.00 | 16 |

Product availability varies by region and minimum run quantities may apply
Listed to UL 651

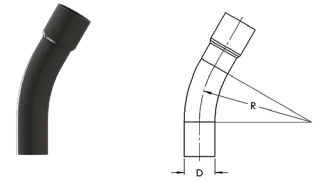


Schedule 80 Standard Radius Elbows

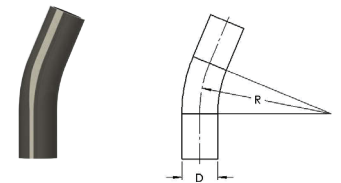
| Trade Size | Part Number | | Dimensions (in) | | Package Quantity |
|-------------|-------------|----------|-----------------------------|----------|------------------|
| | Plain End | Bell End | Average Outside Diameter, D | Radius R | |
| 30° | | | | | |
| ¾ | F8007530P | F8007530 | 1.050 | 4.50 | 25 |
| 1 | F8010030P | F8010030 | 1.315 | 5.75 | 25 |
| 1¼ | F8012530P | F8012530 | 1.660 | 7.25 | 25 |
| 1½ | F8015030P | F8015030 | 1.900 | 8.25 | 25 |
| 2 | F8020030P | F8020030 | 2.375 | 9.50 | 25 |
| 2½ | F8025030P | F8025030 | 2.875 | 10.50 | 20 |
| 3 | F8030030P | F8030030 | 3.500 | 13.00 | 50 |
| 3½ | F8035030P | F8035030 | 4.000 | 15.00 | 25 |
| 4 | F8040030P | F8040030 | 4.500 | 16.00 | 25 |
| 5 | F8050030P | F8050030 | 5.563 | 24.00 | 20 |
| 6 | F8060030P | F8060030 | 6.625 | 30.00 | 16 |
| 22½° | | | | | |
| ¾ | F8007522P | F8007522 | 1.050 | 4.50 | 25 |
| 1 | F8010022P | F8010022 | 1.315 | 5.75 | 25 |
| 1¼ | F8012522P | F8012522 | 1.660 | 7.25 | 25 |
| 1½ | F8015022P | F8015022 | 1.900 | 8.25 | 25 |
| 2 | F8020022P | F8020022 | 2.375 | 9.50 | 25 |
| 2½ | F8025022P | F8025022 | 2.875 | 10.50 | 20 |
| 3 | F8030022P | F8030022 | 3.500 | 13.00 | 50 |
| 3½ | F8035022P | F8035022 | 4.000 | 15.00 | 25 |
| 4 | F8040022P | F8040022 | 4.500 | 16.00 | 25 |
| 5 | F8050022P | F8050022 | 5.563 | 24.00 | 20 |
| 6 | F8060022P | F8060022 | 6.625 | 30.00 | 16 |



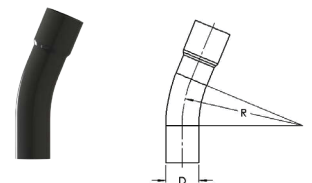
30° Plain End



30° Bell End



22½° Plain End



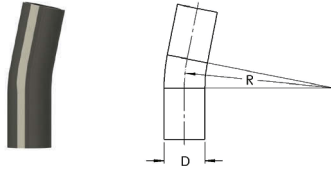
22½° Bell End

Product availability varies by region and minimum run quantities may apply
Listed to UL 651

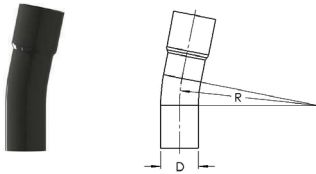


Schedule 80 Standard Radius Elbows

| Trade Size | Part Number | | Dimensions (in) | | Package Quantity |
|-------------|-------------|----------|-----------------------------|----------|------------------|
| | Plain End | Bell End | Average Outside Diameter, D | Radius R | |
| 11¼° | | | | | |
| ¾ | F8007511P | F8007511 | 1.050 | 4.50 | 25 |
| 1 | F8010011P | F8010011 | 1.315 | 5.75 | 25 |
| 1¼ | F8012511P | F8012511 | 1.660 | 7.25 | 25 |
| 1½ | F8015011P | F8015011 | 1.900 | 8.25 | 25 |
| 2 | F8020011P | F8020011 | 2.375 | 9.50 | 25 |
| 2½ | F8025011P | F8025011 | 2.875 | 10.50 | 20 |
| 3 | F8030011P | F8030011 | 3.500 | 13.00 | 50 |
| 3½ | F8035011P | F8035011 | 4.000 | 15.00 | 25 |
| 4 | F8040011P | F8040011 | 4.500 | 16.00 | 25 |
| 5 | F8050011P | F8050011 | 5.563 | 24.00 | 20 |
| 6 | F8060011P | F8060011 | 6.625 | 30.00 | 16 |



11¼° Plain End



11¼° Bell End

Product availability varies by region and minimum run quantities may apply
Listed to UL 651



Schedule 40 Plain End Special Radius Elbows

| Trade Size | Part Number | | | | | | Package Quantity |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|------------------|
| | 18" Radius | 24" Radius | 30" Radius | 36" Radius | 48" Radius | 60" Radius | |
| 90° | | | | | | | |
| 1 | F401009018P | F401009024P | F401009030P | F401009036P | F401009048P | F401009060P | 25 |
| 1¼ | F401259018P | F401259024P | F401259030P | F401259036P | F401259048P | F401259060P | 25 |
| 1½ | F401509018P | F401509024P | F401509030P | F401509036P | F401509048P | F401509060P | 25 |
| 2 | F402009018P | F402009024P | F402009030P | F402009036P | F402009048P | F402009060P | 50 |
| 2½ | F402509018P | F402509024P | F402509030P | F402509036P | F402509048P | F402509060P | 50 |
| 3 | F403009018P | F403009024P | F403009030P | F403009036P | F403009048P | F403009060P | 50 |
| 3½ | F403509018P | F403509024P | F403509030P | F403509036P | F403509048P | F403509060P | 25 |
| 4 | F404009018P | F404009024P | F404009030P | F404009036P | F404009048P | F404009060P | 25 |
| 5 | - | F4050090P | F405009030P | F405009036P | F405009048P | F405009060P | 20 |
| 6 | - | - | F4060090P | F406009036P | F406009048P | F406009060P | 16 |
| 45° | | | | | | | |
| 1 | F401004518P | F401004524P | F401004530P | F401004536P | F401004548P | F401004560P | 25 |
| 1¼ | F401254518P | F401254524P | F401254530P | F401254536P | F401254548P | F401254560P | 25 |
| 1½ | F401504518P | F401504524P | F401504530P | F401504536P | F401504548P | F401504560P | 25 |
| 2 | F402004518P | F402004524P | F402004530P | F402004536P | F402004548P | F402004560P | 50 |
| 2½ | F402504518P | F402504524P | F402504530P | F402504536P | F402504548P | F402504560P | 50 |
| 3 | F403004518P | F403004524P | F403004530P | F403004536P | F403004548P | F403004560P | 50 |
| 3½ | F403504518P | F403504524P | F403504530P | F403504536P | F403504548P | F403504560P | 25 |
| 4 | F404004518P | F404004524P | F404004530P | F404004536P | F404004548P | F404004560P | 25 |
| 5 | - | F4050045P | F405004530P | F405004536P | F405004548P | F405004560P | 20 |
| 6 | - | - | F4060045P | F406004536P | F406004548P | F406004560P | 16 |

Call for availability on 30°, 22½° and 11¼° special radius elbows
 Product availability varies by region and minimum run quantities may apply
 Listed to UL 651



Schedule 40 Bell End Special Radius Elbows

| Trade Size | Part Number | | | | | | Package Quantity |
|------------|-------------|------------|------------|------------|------------|------------|------------------|
| | 18" Radius | 24" Radius | 30" Radius | 36" Radius | 48" Radius | 60" Radius | |
| 90° | | | | | | | |
| 1 | F401009018 | F401009024 | F401009030 | F401009036 | F401009048 | F401009060 | 25 |
| 1¼ | F401259018 | F401259024 | F401259030 | F401259036 | F401259048 | F401259060 | 25 |
| 1½ | F401509018 | F401509024 | F401509030 | F401509036 | F401509048 | F401509060 | 25 |
| 2 | F402009018 | F402009024 | F402009030 | F402009036 | F402009048 | F402009060 | 50 |
| 2½ | F402509018 | F402509024 | F402509030 | F402509036 | F402509048 | F402509060 | 50 |
| 3 | F403009018 | F403009024 | F403009030 | F403009036 | F403009048 | F403009060 | 50 |
| 3½ | F403509018 | F403509024 | F403509030 | F403509036 | F403509048 | F403509060 | 25 |
| 4 | F404009018 | F404009024 | F404009030 | F404009036 | F404009048 | F404009060 | 25 |
| 5 | - | F4050090 | F405009030 | F405009036 | F405009048 | F405009060 | 20 |
| 6 | - | - | F4060090 | F406009036 | F406009048 | F406009060 | 16 |
| 45° | | | | | | | |
| 1 | F401004518 | F401004524 | F401004530 | F401004536 | F401004548 | F401004560 | 25 |
| 1¼ | F401254518 | F401254524 | F401254530 | F401254536 | F401254548 | F401254560 | 25 |
| 1½ | F401504518 | F401504524 | F401504530 | F401504536 | F401504548 | F401504560 | 25 |
| 2 | F402004518 | F402004524 | F402004530 | F402004536 | F402004548 | F402004560 | 50 |
| 2½ | F402504518 | F402504524 | F402504530 | F402504536 | F402504548 | F402504560 | 50 |
| 3 | F403004518 | F403004524 | F403004530 | F403004536 | F403004548 | F403004560 | 50 |
| 3½ | F403504518 | F403504524 | F403504530 | F403504536 | F403504548 | F403504560 | 25 |
| 4 | F404004518 | F404004524 | F404004530 | F404004536 | F404004548 | F404004560 | 25 |
| 5 | - | F4050045 | F405004530 | F405004536 | F405004548 | F405004560 | 20 |
| 6 | - | - | F4060045 | F406004536 | F406004548 | F406004560 | 16 |

Call for availability on 30°, 22½° and 11¼° special radius elbows
 Product availability varies by region and minimum run quantities may apply
 Listed to UL 651



Schedule 80 Special Radius Elbows

| Trade Size | Part Number | | | Package Quantity |
|----------------------|-------------|-------------|-------------|------------------|
| | 24" Radius | 36" Radius | 48" Radius | |
| Plain End 90° | | | | |
| 2 | F802009024P | F802009036P | F802009048P | 50 |
| 2½ | F802509024P | F802509036P | F802509048P | 50 |
| 3 | F803009024P | F803009036P | F803009048P | 50 |
| 4 | F804009024P | F804009036P | F804009048P | 25 |
| 5 | F8050090P | F805009036P | F805009048P | 20 |
| 6 | - | F806009036P | F806009048P | 16 |
| Plain End 45° | | | | |
| 2 | F802004524P | F802004536P | F802004548P | 50 |
| 2½ | F802504524P | F802504536P | F802504548P | 50 |
| 3 | F803004524P | F803004536P | F803004548P | 50 |
| 4 | F804004524P | F804004536P | F804004548P | 25 |
| 5 | F8050045P | F805004536P | F805004548P | 20 |
| 6 | - | F806004536P | F806004548P | 16 |
| Bell End 90° | | | | |
| 2 | F802009024 | F802009036 | F802009048 | 50 |
| 2½ | F802509024 | F802509036 | F802509048 | 50 |
| 3 | F803009024 | F803009036 | F803009048 | 50 |
| 4 | F804009024 | F804009036 | F804009048 | 25 |
| 5 | F8050090 | F805009036 | F805009048 | 20 |
| 6 | - | F806009036 | F806009048 | 16 |
| Bell End 45° | | | | |
| 2 | F802004524 | F802004536 | F802004548 | 50 |
| 2½ | F802504524 | F802504536 | F802504548 | 50 |
| 3 | F803004524 | F803004536 | F803004548 | 50 |
| 4 | F804004524 | F804004536 | F804004548 | 25 |
| 5 | F8050045 | F805004536 | F805004548 | 20 |
| 6 | - | F806004536 | F806004548 | 16 |

Call for availability on 30°, 22½° and 11¼° special radius elbows
 Product availability varies by region and minimum run quantities may apply
 Listed to UL 651



Utility/C-Duct Special Radius Elbows

Utility Duct

| Trade Size | Part Number | | | | Package Quantity |
|-------------|-------------|------------|------------|------------|------------------|
| | 24" Radius | 36" Radius | 48" Radius | 60" Radius | |
| 90° | | | | | |
| 1 | F121009024 | F121009036 | F121009048 | F121009060 | 25 |
| 2 | F122009024 | F122009036 | F122009048 | F122009060 | 50 |
| 3 | F123009024 | F123009036 | F123009048 | F123009060 | 50 |
| 4 | F124009024 | F124009036 | F124009048 | F124009060 | 25 |
| 5 | F125009024 | F125009036 | F125009048 | F125009060 | 20 |
| 6 | - | F126009036 | F126009048 | F126009060 | 16 |
| 45° | | | | | |
| 1 | F121004524 | F121004536 | F121004548 | F121004560 | 25 |
| 2 | F122004524 | F122004536 | F122004548 | F122004560 | 50 |
| 3 | F123004524 | F123004536 | F123004548 | F123004560 | 50 |
| 4 | F124004524 | F124004536 | F124004548 | F124004560 | 25 |
| 5 | F125004524 | F125004536 | F125004548 | F125004560 | 20 |
| 6 | - | F126004536 | F126004548 | F126004560 | 16 |
| 22½° | | | | | |
| 1 | F121002224 | F121002236 | F121002248 | F121002260 | 25 |
| 2 | F122002224 | F122002236 | F122002248 | F122002260 | 50 |
| 3 | F123002224 | F123002236 | F123002248 | F123002260 | 50 |
| 4 | F124002224 | F124002236 | F124002248 | F124002260 | 25 |
| 5 | F125002224 | F125002236 | F125002248 | F125002260 | 20 |
| 6 | - | F126002236 | F126002248 | F126002260 | 16 |

Sweeps made from DB120, but can be used with any EB or DB duct

4" C-Duct

| Degree | Part Number | | | | Package Quantity |
|--------|-------------|------------|------------|------------|------------------|
| | 24" Radius | 36" Radius | 48" Radius | 60" Radius | |
| 11¼° | F904001124 | F904001136 | F904001148 | F904001160 | 25 |
| 22½° | F904002224 | F904002236 | F904002248 | F904002260 | 25 |
| 45° | F904004524 | F904004536 | F904004548 | F904004560 | 25 |
| 90° | F904009024 | F904009036 | F904009048 | F904009060 | 25 |

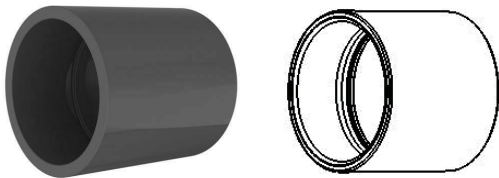
If you don't see the product you require, please call for availability
Product availability varies by region and minimum run quantities may apply



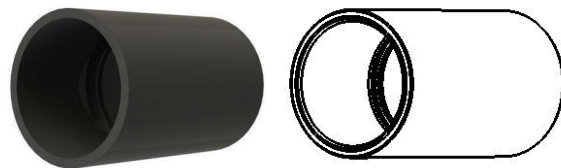
Couplings

| Trade Size | Part Number | Package Quantity |
|----------------------------|-------------|------------------|
| Couplings | | |
| ½ | CP05 | 200 |
| ¾ | CP07 | 125 |
| 1 | CP10 | 70 |
| 1¼ | CP12 | 40 |
| 1½ | CP15 | 30 |
| 2 | CP20 | 40 |
| 2½ | CP25 | 20 |
| 3 | CP30 | 40 |
| 3½ | CP35 | 30 |
| 4 | CP40 | 20 |
| 5 | CP50 | 10 |
| 6 | CP60 | 8 |
| 8* | CP80 | 1 |
| Long Line Couplings | | |
| 1½ | LLC15 | 25 |
| 2 | LLC20 | 20 |
| 2½ | LLC25 | 25 |
| 3 | LLC30 | 25 |
| 4 | LLC40 | 15 |
| 5 | LLC50 | 8 |
| 6 | LLC60 | 4 |

*8 inch products are not included in UL 651
Conforms to NEMA TC-3




Coupling
Listed to UL 651



Long Line Coupling

Product appearance
may vary by region

Adapters

| | Trade Size | Part Number | Package Quantity |
|--|------------|-------------|------------------|
| Terminal Adapters | | | |
|  <p>Terminal Adapters</p> | ½ | TA05 | 200 |
| | ¾ | TA07 | 125 |
| | 1 | TA10 | 70 |
| | 1¼ | TA12 | 40 |
| | 1½ | TA15 | 30 |
| | 2 | TA20 | 40 |
| | 2½ | TA25 | 20 |
| | 3 | TA30 | 40 |
| | 3½ | TA35 | 30 |
| | 4 | TA40 | 20 |
| | 5 | TA50 | 10 |
| | 6 | TA60 | 8 |
| 8* | TA80 | 2 | |
| Female Adapters | | | |
|  <p>Female Adapters</p> | ½ | FA05 | 200 |
| | ¾ | FA07 | 125 |
| | 1 | FA10 | 70 |
| | 1¼ | FA12 | 40 |
| | 1½ | FA15 | 30 |
| | 2 | FA20 | 40 |
| | 2½ | FA25 | 20 |
| | 3 | FA30 | 40 |
| | 3½ | FA35 | 30 |
| | 4 | FA40 | 20 |
| | 5 | FA50 | 10 |
| | 6 | FA60 | 8 |
| 8* | FA80 | 2 | |

*8 inch products are not included in UL 651



Expansion Couplings and Repair Sleeve Couplings

| Trade Size | Part Number | Package Quantity |
|--------------------------------------|-------------|------------------|
| One Piece Expansion Couplings | | |
| ½ | EJ-105 | 80 |
| ¾ | EJ-107 | 50 |
| 1 | EJ-110 | 50 |
| 1¼ | EJ-112 | 25 |
| 1½ | EJ-115 | 25 |
| 2 | EJ-120 | 10 |
| Two Piece Expansion Couplings | | |
| ½ | EJ05 | 25 |
| ¾ | EJ07 | 25 |
| 1 | EJ10 | 40 |
| 1¼ | EJ12 | 20 |
| 1½ | EJ15 | 20 |
| 2 | EJ20 | 10 |
| 2½ | EJ25 | 9 |
| 3 | EJ30 | 9 |
| 3½ | EJ35 | 5 |
| 4 | EJ40 | 5 |
| 5 | EJ50 | 1 |
| 6 | EJ60 | 1 |
| Repair Sleeve Couplings | | |
| 1 | 40REC10 | 50 |
| 1¼ | 40REC12 | 50 |
| 1½ | 40REC15 | 50 |
| 2 | 40REC20 | 50 |
| 2½ | 40REC25 | 30 |
| 3 | 40REC30 | 30 |
| 4 | 40REC40 | 30 |
| 5 | 40REC50 | 15 |
| 6 | 40REC60 | 10 |



Expansion Coupling
One Piece



Expansion Coupling
Two Piece



Repair Sleeve Coupling

Product availability may vary by region

Swedge Couplings and Swedge Reducers

Swedge Couplings

| Trade Size | Part Number | Package Quantity |
|--------------------|-------------|------------------|
| DB | | |
| 1½ | 60SWC15 | 50 |
| 2 | 60SWC20 | 50 |
| 3 | 60SWC30 | 30 |
| 4 | 60SWC40 | 30 |
| 5 | 60SWC50 | 15 |
| 6 | 60SWC60 | 10 |
| Schedule 40 | | |
| 1 | 40SWC10 | 50 |
| 1¼ | 40SWC12 | 50 |
| 1½ | 40SWC15 | 50 |
| 2 | 40SWC20 | 50 |
| 2½ | 40SWC25 | 30 |
| 3 | 40SWC30 | 30 |
| 4 | 40SWC40 | 30 |
| 5 | 40SWC50 | 15 |
| 6 | 40SWC60 | 10 |
| 8 | 40SWC80 | 6 |
| Schedule 80 | | |
| 2 | 80SWC20 | 50 |
| 3 | 80SWC30 | 30 |
| C-Duct | | |
| 4 C-Duct to 4 Duct | C60SWC40 | 30 |
| 4 | CSWC40 | 30 |

Product availability may vary by region



Swedge Coupling

Swedge Reducers Spigot x Spigot

| Trade Size | Part Number | Package Quantity |
|--------------------|-------------|------------------|
| DB | | |
| 2½ x 2 | 60SW2520SS | 100 |
| 3 x 2 | 60SW3020SS | 80 |
| 3 x 2½ | 60SW3025SS | 80 |
| 4 x 3 | 60SW4030SS | 60 |
| 5 x 4 | 60SW5040SS | 36 |
| 6 x 5 | 60SW6050SS | 36 |
| Schedule 40 | | |
| 1 ½ x 1 | 40SW1510SS | 25 |
| 2 x 1½ | 40SW2015SS | 25 |
| 2½ x 2 | 40SW2520SS | 80 |
| 3 x 2 | 40SW3020SS | 80 |
| 3 x 2½ | 40SW3025SS | 80 |
| 4 x 3 | 40SW4030SS | 60 |
| 5 x 4 | 40SW5040SS | 36 |
| 6 x 5 | 40SW6050SS | 36 |
| Schedule 80 | | |
| 3 x 2 | 80SW3020SS | 80 |
| 4 x 3 | 80SW4030SS | 60 |
| 5 x 4 | 80SW5040SS | 36 |

Product availability may vary by region



Swedge Reducer Spigot x Spigot

5° Couplings and Meter Risers

5° Couplings

| Trade Size | Part Number | | Package Quantity |
|--------------------|-------------|---------------|------------------|
| | Bell x Bell | Bell x Spigot | |
| DB | | | |
| 3 | 605EC30BB | 605EC30BS | 30 |
| 4 | 605EC40BB | 605EC40BS | 30 |
| 5 | 605EC50BB | 605EC50BS | 15 |
| 6 | 605EC60BB | 605EC60BS | 10 |
| Schedule 40 | | | |
| 2 | 405EC20BB | 405EC20BS | 50 |
| 3 | 405EC30BB | 405EC30BS | 30 |
| 4 | 405EC40BB | 405EC40BS | 30 |
| 5 | 405EC50BB | 405EC50BS | 15 |
| 6 | 405EC60BB | 405EC60BS | 10 |
| C-Duct | | | |
| 4 | C5EC40BB | C5EC40BS | 30 |

Product availability may vary by region



Bell x Bell



Bell x Spigot

Slip Meter Risers


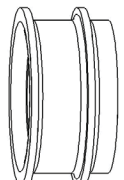

| Trade Size | Part Number | Package Quantity |
|--------------------|-------------|------------------|
| Schedule 40 | | |
| 2 | MTR40200 | 10 |
| 2½ | MTR40250 | 8 |
| 3 | MTR40300 | 5 |
| 4 | MTR40400 | 3 |

Product availability may vary by region



Meter Riser

End Bells and Reducer Bushings

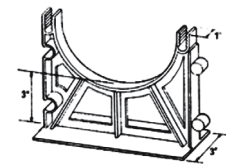
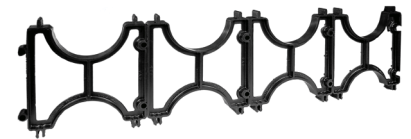
| | Trade Size | Part Number | Package Quantity |
|--|------------|-------------|------------------|
| End Bells | | | |
|   End Bell | ½ | MEB05 | 100 |
| | ¾ | MEB07 | 100 |
| | 1 | MEB10 | 50 |
| | 1¼ | MEB12 | 50 |
| | 1½ | MEB15 | 50 |
| | 2 | MEB20 | 40 |
| | 2½ | MEB25 | 30 |
| | 3 | MEB30 | 50 |
| | 3½ | MEB35 | 50 |
| | 4 | MEB40 | 50 |
| | 5 | MEB50 | 25 |
| | 6 | MEB60 | 15 |
| | 8 | MEB80 | 1 |
| Reducer Bushings | | | |
|  Reducer Bushing | ¾ x ½ | MR0705 | 100 |
| | 1 x ½ | MR1005 | 100 |
| | 1 x ¾ | MR1007 | 100 |
| | 1¼ x ¾ | MR1207 | 50 |
| | 1¼ x 1 | MR1210 | 50 |
| | 1½ x 1 | MR1510 | 50 |
| | 1½ x 1 ¼ | MR1512 | 50 |
| | 2 x 1 | MR2010 | 50 |
| | 2 x 1 ¼ | MR2012 | 25 |
| | 2 x 1 ½ | MR2015 | 25 |
| | 2½ x 2 | MR2520 | 15 |
| | 3 x 2 | MR3020 | 25 |
| | 3 x 2 ½ | MR3025 | 15 |
| | 4 x 2 | MR4020 | 10 |
| | 4 x 3 | MR4030 | 10 |
| | 4 x 3 ½ | MR4035 | 15 |

Product availability may vary by region

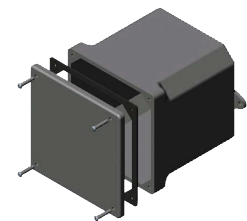


Duct Spacers and Junction Boxes

| Trade Size | Part Number | Package Quantity | Part Number | Package Quantity |
|------------|---------------------|------------------|---------------------|------------------|
| | | | | |
| 2 x 1½ | IV2015 | 350 | BV2015 | 250 |
| 2 x 2 | IV2020 | 300 | BV2020 | 225 |
| 2 x 3 | IV2030 | 200 | BV2030 | 225 |
| 3 x 1½ | IV3015 | 225 | BV3015 | 175 |
| 3 x 2 | IV3020 | 200 | BV3020 | 155 |
| 3 x 3 | IV3030 | 125 | BV3030 | 150 |
| 4 x 1 | IV4010 | 200 | BV4010 | 175 |
| 4 x 1½ | IV4015 | 150 | BV4015 | 140 |
| 4 x 2 | IV4020 | 125 | BV4020 | 140 |
| 4 x 3 | IV4030 | 90 | BV4030 | 120 |
| 5 x 1½ | IV5015 | 100 | BV5015 | 120 |
| 5 x 2 | IV5020 | 100 | BV5020 | 120 |
| 5 x 3 | IV5030 | 80 | BV5030 | 100 |
| 6 x 1½ | IV6015 | 100 | BV6015 | 100 |
| 6 x 2 | IV6020 | 90 | BV6020 | 100 |
| 6 x 3 | IV6030 | 70 | BV6030 | 95 |
| 8 x 2 | IV8020 | 60 | BV8020 | 50 |
| | Self Tapping Screws | | Brass Screw Inserts | |
| 4x4x2 | JB442S | 10 | JB442 | 15 |
| 4x4x4 | JB444S | 10 | JB444 | 10 |
| 4x4x6 | JB446S | 10 | JB446 | 8 |
| 5x5x2 | JB552S | 10 | JB552 | 12 |
| 6x6x4 | JB664S | 10 | JB664 | 15 |
| 6x6x6 | JB666S | 5 | JB666 | 4 |
| 8x8x4 | JB884S | 5 | JB884 | 4 |
| 8x8x7 | JB887S | 4 | JB887 | 4 |
| 12x12x4 | JB12124S | 2 | JB12124 | 2 |
| 12x12x6 | JB12126S | 2 | JB12126 | 4 |
| 12x12x8 | JB12128S | 3 | JB12128 | 3 |



Spacers



Junction Box

Product appearance may vary by region
Product availability may vary by region

| Trade Size | Part Number | | | | | | Package Quantity | |
|------------|-------------|-----|------|------|-----|-----|------------------|--------|
| | LB | T | LR | LL | E | C | | T Only |
| ½ | LB05 | T05 | LR05 | LL05 | E05 | C05 | 25 | 25 |
| ¾ | LB07 | T07 | LR07 | LL07 | E07 | C07 | 15 | 15 |
| 1 | LB10 | T10 | LR10 | LL10 | E10 | C10 | 10 | 10 |
| 1¼ | LB12 | T12 | LR12 | LL12 | E12 | C12 | 10 | 10 |
| 1½ | LB15 | T15 | LR15 | LL15 | E15 | C15 | 10 | 10 |
| 2 | LB20 | T20 | LR20 | LL20 | E20 | C20 | 5 | 5 |
| 2½ | LB25 | T25 | LR25 | LL25 | E25 | C25 | 5 | 2 |
| 3 | LB30 | T30 | LR30 | LL30 | E30 | C30 | 5 | 2 |
| 3½ | LB35 | T35 | LR35 | LL35 | E35 | C35 | 4 | 1 |
| 4 | LB40 | T40 | LR40 | LL40 | E40 | C40 | 4 | 1 |

Product availability may vary by region



Type LB



Type T



Type LR



Type LL



Type E



Type C

Accessories

| Trade Size | Part Number | Package Quantity |
|-----------------------------|-------------|------------------|
| Meter Offsets | | |
| 1¼ | MO12 | 50 |
| 2 | MO20 | 25 |
| Two Hole Pipe Straps | | |
| ½ | PS05 | 400 |
| ¾ | PS07 | 200 |
| 1 | PS10 | 200 |
| 1¼ | PS12 | 200 |
| 1½ | PS15 | 200 |
| 2 | PS20 | 200 |
| 2½ | PS25 | 100 |
| 3 | PS30 | 100 |
| 4 | PS40 | 100 |
| Pull Elbows | | |
| ½ & ¾ | PULEL0705 | 50 |
| Expandable Plugs | | |
| 2 | KW20L | 50 |
| 2½ | KW25L | 30 |
| 3 | KW30L | 30 |
| 4 | KW40L | 30 |
| 5 | KW50L | 20 |
| Temporary Plugs | | |
| 1 | UTP10 | 100 |
| 1¼ | UTP12 | 100 |
| 1½ | UTP15 | 100 |
| 2 | UTP20 | 100 |
| 2½ | UTP25 | 100 |
| 3 | UTP30 | 80 |
| 3½ | UTP35 | 80 |
| 4 | UTP40 | 50 |
| 5 | UTP50 | 40 |
| 6 | UTP60 | 30 |
| 8 | UTP80 | 12 |



Meter Offset



Two Hole Pipe Strap



Pull Elbow



Expandable Plug



Temporary Plug

Product availability may vary by region

Accessories

| | Trade Size | Part Number | Package Quantity |
|---|-------------------------------|-------------|------------------|
|  <p>Junction Box Adapter</p> | Junction Box Adapters | | |
| | ½ | JBA05 | 100 |
| | ¾ | JBA07 | 100 |
| | 1 | JBA10 | 100 |
| | 1¼ | JBA12 | 50 |
| | 1½ | JBA15 | 50 |
| | 2 | JBA20 | 25 |
| | 2½ | JBA25 | 10 |
| | 3 | JBA30 | 10 |
| | 3½ | JBA35 | 10 |
| 4 | JBA40 | 10 | |
|  <p>Service Entrance Head</p> | Service Entrance Heads | | |
| | ½ | MH05 | 25 |
| | ¾ | MH07 | 25 |
| | 1 | MH10 | 15 |
| | 1¼ | MH12 | 20 |
| | 1½ | MH15 | 5 |
| | 2 | MH20 | 5 |
| | 2½ | MH25 | 2 |
| | 3 | MH30 | 2 |
| | 3½ | MH35 | 2 |
| 4 | MH40 | 2 | |
|  <p>End Cap</p> | End Caps | | |
| | ½ | EC05 | 200 |
| | ¾ | EC07 | 150 |
| | 1 | EC10 | 100 |
| | 1¼ | EC12 | 40 |
| | 1½ | EC15 | 40 |
| | 2 | EC20 | 20 |
| | 2½ | EC25 | 15 |
| | 3 | EC30 | 10 |
| | 3½ | EC35 | 25 |
| | 4 | EC40 | 12 |
| | 5 | EC50 | 5 |
| | 6 | EC60 | 10 |
| 8 | EC80 | 1 | |

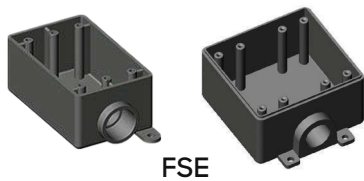
Product availability may vary by region



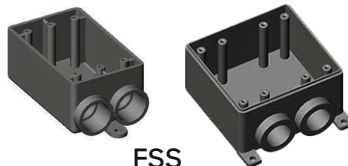
F-Series Boxes

| Type | Trade Size | Part Number | Package Quantity |
|-----------------|--------------------|---------------|------------------|
| FSE | | | |
| Single Gang | 1/2 | FSE05 | 10 |
| Single Gang | 3/4 | FSE07 | 10 |
| Single Gang | 1 | FSE10 | 10 |
| Single Gang | 1/2 - 3/4 - 1 Deep | FSED050710 | 10 |
| Double Gang | 1/2 - 3/4 - 1 | FSE-2-050710 | 5 |
| FSS | | | |
| Single Gang | 1/2 | FSS05 | 10 |
| Single Gang | 3/4 | FSS07 | 10 |
| Single Gang | 1 | FSS10 | 10 |
| Double Gang | 1/2 - 3/4 - 1 | FSS-2-050710 | 5 |
| FSC | | | |
| Single Gang | 1/2 | FSC05 | 10 |
| Single Gang | 3/4 | FSC07 | 10 |
| Single Gang | 1 | FSC10 | 10 |
| Single Gang | 1/2 - 3/4 - 1 Deep | FSCD050710 | 10 |
| Double Gang | 1/2 - 3/4 - 1 | FSC-2-050710 | 5 |
| FSCC | | | |
| Single Gang | 1/2 | FSCC05 | 10 |
| Single Gang | 3/4 | FSCC07 | 10 |
| Single Gang | 1 | FSCC10 | 10 |
| Double Gang | 1/2 - 3/4 - 1 | FSCC-2-050710 | 5 |
| FD Blank | | | |
| Single Gang | Deep | FD | 20 |
| Double Gang | Deep | FD-2 | 100 |

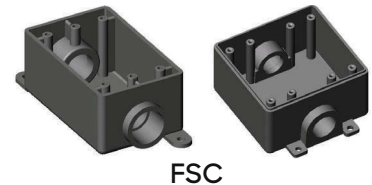
Product availability may vary by region



FSE



FSS



FSC



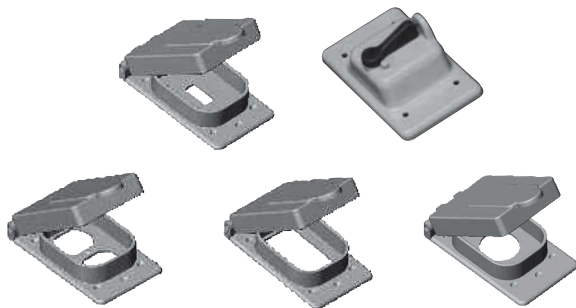
FSCC



FD Blank

| Type | Description | Part Number | Package Quantity |
|----------------------------|--------------------------------|-------------|------------------|
| Weatherproof Covers | | | |
| Single Gang | Toggle Switch | WTG 15/10 | 20 |
| Single Gang | Toggle Switch with Lock | VSC 15/10 | 20 |
| Single Gang | Duplex Receptacle | WDR 15/10 | 20 |
| Single Gang | GFI Receptacle | WGF 15/10 | 20 |
| Single Gang | Single Receptacle - 15 amps | WTL 15 | 10 |
| Double Gang | Double Toggle Switch with Lock | VSC20-2 | 10 |
| Double Gang | Double GFI Receptacle | VSGG20-2 | 15 |
| Double Gang | Double Duplex Receptacle | VSDD20-2 | 15 |
| Covers | | | |
| Single Gang | Toggle Switch | TSC 15/10 | 100 |
| Single Gang | Duplex Receptacle | DRC 15/10 | 100 |
| Single Gang | Single Blank with Gasket | FSKIT | 50 |
| Double Gang | Double Switch | TSC20-2 | 50 |
| Double Gang | Double Duplex | DRC20-2 | 50 |
| Double Gang | Double Blank with Gasket | BRC20-2 | 50 |

Product availability may vary by region



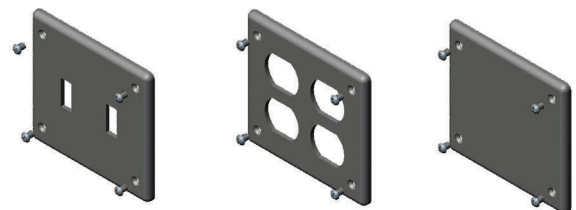
Single Gang Weatherproof Covers



Double Gang Weatherproof Covers



Single Gang Covers



Double Gang Covers

Cement, Cleaner, Primer

| Type | Size | Part Number | Package Quantity |
|----------------------|-----------|-------------|------------------|
| Cement | | | |
| Regular Body - Clear | Pint | CEMCR10 | 12 |
| Regular Body - Clear | Quart | CEMCR20 | 12 |
| Medium Body - Clear | Half Pint | CEMC05 | 24 |
| Medium Body - Clear | Pint | CEMC10 | 12 |
| Medium Body - Clear | Quart | CEMC20 | 12 |
| Medium Body - Clear | Gallon | CEMC80 | 6 |
| Medium Body - Gray | Quart | CEMG20 | 12 |
| Heavy Body - Clear | Quart | CEMCH20 | 12 |
| All Weather - Clear | Pint | CWC10 | 12 |
| All Weather - Clear | Quart | CWC20 | 12 |
| All Weather - Blue | Quart | CWB20 | 12 |
| Cleaner | | | |
| Clear | Quart | CLN20 | 12 |
| Primer | | | |
| Clear | Quart | PRMC20 | 12 |
| Purple | Pint | PRMP10 | 12 |
| Purple | Quart | PRMP20 | 12 |

Product availability may vary by region



Atkore - Allied Tube & Conduit / Heritage Plastics / Queen City Plastics

This product specification is written according to the Construction Specifications Institute
MasterFormat, 2018 Update.

SECTION 26 05 33.13

CONDUIT FOR ELECTRICAL SYSTEMS – Schedule 40 / Schedule 80 PVC Conduit, Elbows and Fittings

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
- B. Schedule 40 and Schedule 80 PVC conduit, Elbows and Fittings
- C. Related Sections
 - 1. Section 26 05 26 “Grounding and Bonding for Electrical Systems”
 - 2. Section 26 05 29 “Hangers and Supports for Electrical Systems”
 - 3. Section 26 05 33.16 “Boxes for Electrical Systems”
 - 4. Section 27 05 33 “Conduits and Backboxes for Communications Systems”
 - 5. Section 25 05 28.33 “Conduits and Backboxes for Integrated Automation”

1.3 REFERENCES

- A. UL 651 Safety Standard– *Schedule 40, 80, Type EB and A Rigid PVC Conduit and Fittings*
- B. NEMA TC-2 *Electrical Polyvinyl Chloride (PVC) Conduit*
- C. NEMA TC-3 *Polyvinyl Chloride (PVC) Fittings for Use with Rigid PVC Conduit and Tubing*
- D. NFPA 70 – *National Electrical Code® (NEC®)*
- E. NECA NEIS 111 – *National Electrical Installation Standard for Installing Nonmetallic Raceways*

1.4 SUBMITTALS

- A. Manufacturer’s Product Data
- B. Certifications to applicable standards
- C. Domestic certifications: When required to Buy American Act or Buy America Act, comply with the provisions of Section 01 33 13

1.5 QUALITY ASSURANCE

- A. Schedule 40 and Schedule 80 PVC Conduit and Fittings shall be listed to UL 651 and manufactured in accordance with NEMA TC-2 (conduit) and NEMA TC-3 (fittings).
- B. Electrical equipment and materials shall be new and within one year of manufacture, complying with the latest codes and standards. No used, re-built, refurbished and/or re-manufactured electrical equipment and materials shall be furnished on this project.
- C. Testing Agency Qualifications: Testing/listing agency shall be one of the following Nationally Recognized Testing Laboratories:
 - 1. Underwriters Laboratories (UL)
 - 2. Intertek Testing Services (ETL)
 - 3. NSF International

1.6 STORAGE AND HANDLING

- A. Storage: Whenever possible, store the conduit indoors to prevent possible discoloration, the accumulation of dirt and to extend the life of the product. If conduit is stored outdoors, it shall be stored in such a way as to allow air circulation and water drain-off and shall not be directly covered with plastic.
- B. Schedule 40 and Schedule 80 PVC conduit shall be listed to UL 651 for use outdoors and where exposed to direct sunlight.

PART 2 – PRODUCTS

2.1 BRANDS

- A. Allied Tube & Conduit
- B. Heritage Plastics
- C. Queen City Plastics

2.2 SCHEDULE 40 AND SCHEDULE 80 PVC CONDUIT

- A. PVC Conduit shall be available in trade sizes ½-6.
- B. PVC Conduit shall be listed to UL 651 and manufactured in accordance with NEMA TC-2.
- C. PVC Conduit shall be labeled or marked showing evidence of third-party listing to product standard.
- D. PVC Conduit shall be listed as sunlight resistant.
- E. PVC Conduit shall be listed for use with 90° conductors.

2.3 INTEGRAL COUPLINGS

- A. Integral couplings shall be listed to UL 651 and manufactured in accordance with NEMA TC-2.

2.4 ELBOWS

- A. Elbows shall be listed to UL 651 and manufactured in accordance with NEMA TC-3.

2.5 FITTINGS

- A. Fittings, including fabricated fittings, junction-box adapters, expansion joints, threaded adapters and service entrance heads shall be listed to UL 651 and manufactured in accordance with NEMA TC-3.
- B. Fittings for use in wet locations shall be listed for use in wet-locations.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Schedule 40 and Schedule 80 PVC Conduit, elbows and fittings shall be installed in compliance with the latest version of the National Electrical Code® (NEC®) and other applicable codes and standards as indicated elsewhere in these specifications.
- B. Schedule 40 and Schedule 80 PVC Conduit, elbows and fittings shall be installed in accordance with NECA National Electrical Installation Standard (NEIS) 111, *Standard for Installing Nonmetallic Raceways*.
- C. Schedule 40 PVC conduit shall be acceptable where not subject to physical damage.
- D. Schedule 80 PVC conduit shall be acceptable where subject to physical damage.



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**CERTIFICATE OF CONFORMANCE
BUY AMERICA, BUY AMERICAN
INFRASTRUCTURE INVESTMENT AND JOBS ACT (BABA)
PVC ELECTRICAL CONDUIT**

January 1, 2024

To Whom It May Concern:

This certifies that Rigid Schedule 40 and Schedule 80 PVC electrical conduit and Elbows supplied by Atkore Plastic Pipe Corporation complies with the Buy America requirements of 49 U.S.C. 5323(j)(1) and 50101 and the applicable regulations in 49 CFR part 661 and with the Buy American Act of 1933 (FAR 52.225, Sections 9-12) and of The Build America Buy America Act For domestic compliance letters specific to a customer, project name, or PVC fittings, please contact IndustryAffairs@atkore.com for further assistance.

Atkore Plastic Pipe Corporation is made up of the following manufacturers: Heritage Plastics, Allied Tube & Conduit, American Pipe & Plastics and Cor-Tek. Rigid Schedule 40 and Schedule 80 PVC conduit supplied by Atkore Plastic Pipe Corporation may be branded Heritage/Allied/APPI/Cor-Tek/Queen City Plastics. It is all listed to UL Safety Standard 651 but may be marked with a certification mark from Underwriters Laboratories (UL), Intertek (ETL) or National Sanitation Foundation (NSF).

The UL, NSF, or ETL mark on Atkore PVC conduit verifies that it has been independently tested by a Nationally Recognized Testing Laboratory (NRTL) and is compliant with the appropriate safety standard (UL 651). In addition, the mark indicates that the manufacturing site has been audited by the testing agency and meets follow-up inspections for verification of continued conformance to the standard.

Atkore Schedule 40 and Schedule 80 PVC conduit meet and/or exceed performance standards set by NEMA and UL. Atkore PVC electrical conduit is typically used for industrial, commercial, and residential applications. These include, but are not limited to, residential single and multi-family dwellings, and street and highway lighting.

Atkore PVC electrical conduit is manufactured from PVC compounds complying with the UL 651 standard in standard specifications for rigid PVC compounds ASTM D 1784 (cell classification 12123). Our PVC electrical conduit is subject to in-process quality control to assure compliance with appropriate manufacturing and performance standards.

Atkore PVC electrical conduit conforms to NEMA TC-2, is listed to UL 651, and allowed for use with 90° C conductors in accordance with the National Electrical Code®. It also meets all requirements from the UL 651 standard "Sunlight Resistance Rating"

Atkore electrical conduit is manufactured in Eugene and Pendleton, OR; Kirkwood, NY; Louisville, KY; Milford, UT; Tampa, FL; Thomasville, GA; Fort Mills, SC; and Weatherford, TX.

This certification has been issued for only the products listed above for domestic compliance and is valid for 180 days. Alterations to this document by any agency other than Atkore International, Inc. voids the certification.

Please contact me with any questions regarding this certification.

Atkore Industry Affairs Team

Direct **1.800.882.5543**

Email **Industryaffairs@atkore.com**

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017, OPT. EN 15804+A2

SmartEPD-2024-021-0124-01

Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"



Date of Issue:
May 14, 2024

Expiration:
May 14, 2029

Last updated:
May 14, 2024



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Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

Atkore



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Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

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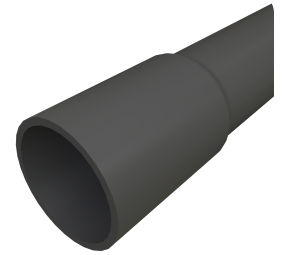
General Information

Atkore

📍 16100 South Lathrop Ave, Harvey, IL, 60426

📞 (708) 915 1547

✉️ rhorner@atkore.com 🌐 [atkore.com](https://www.atkore.com)



| | |
|-----------------------------|---|
| Product Name: | Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2" |
| Declared Unit: | 1 m of conduit product |
| Declaration Number: | SmartEPD-2024-021-0124-01 |
| Date of Issue: | May 14, 2024 |
| Expiration: | May 14, 2029 |
| Last updated: | May 14, 2024 |
| EPD Scope: | Cradle to gate with other options A1 - A3, C1 - C4, D |
| Market(s) of Applicability: | North America |

Reference Standards

| | |
|--------------------------------|---|
| Standard(s): | ISO 14025 and ISO 21930:2017, opt. EN 15804+A2 |
| Core PCR: | Smart EPD® Part A Product Category Rules for Building and Construction Products and Services v.1.01, ISO 21930:2017 Date of issue: January 15, 2024 |
| Sub-category PCR: | Smart EPD® Part B PCR for Electrical and Telecommunications Conduit v.1 Date of issue: January 31, 2024 Valid until: January 31, 2029 |
| Sub-category PCR review panel: | 📄 Contact Smart EPD for more information. |
| General Program Instructions: | 📄 Smart EPD General Program Instructions v.1.0, November 2022 |

Verification Information

| | |
|------------------------------|--|
| ACLCA PCR Guidance Version: | 2022 ACLCA PCR Guidance Process and Methods Toolkit version 1.0 |
| ACLCA PCR Conformance Level: | Transparency |
| LCA Author/Creator: | 🌐 Matthew Neiman ✉️ matt.neiman@truenorthcollective.net |
| EPD Program Operator: | 📄 Smart EPD ✉️ info@smartepd.com 🌐 www.smartepd.com 📍 585 Grove St., Ste. 145 PMB 966, Herndon, VA 20170, USA |

Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

Atkore



Verification:

Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071 :

External

🌐 Nicole Kennard | 🏢 Consultant | ✉ nicolejjk.17@gmail.com

Independent external verification of EPD, according to ISO 14025 and reference PCR(s) :

External

🌐 Nicole Kennard | 🏢 Consultant | ✉ nicolejjk.17@gmail.com

Limitations, Liability, and Ownership

The EPD owner has sole ownership, liability, and responsibility for the EPD.

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of products using EPD information shall be based on the product's use and impacts at the building or construction works level, and therefore EPDs may not be used for comparability purposes when not considering the whole building life cycle. EPD comparability is only possible when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences in results upstream or downstream of the life cycle stages declared.

The environmental impact results of products in this document are based on a declared unit and therefore do not provide sufficient information to establish comparisons. The results shall not be used for comparisons without knowledge of how the physical properties of the product impact the precise function at the construction level. The environmental impact results shall be converted to a functional unit basis before any comparison is attempted.

Organization Information

Atkore is a leading manufacturer of electrical and critical infrastructure products for commercial, industrial, data center, telecommunications, water, and solar applications. Significant product categories include metal conduit, plastic conduit, electrical cable and flexible conduit, metal framing, and cable management systems.

Further information can be found at: <https://www.atkore.com/>

Product Description

PVC Schedule 40 and Schedule 80 Rigid Conduit is non-corrosive, and non-conductive. Our PVC Rigid Conduit conforms to UL 651, excluding 8", and NEMA TC 2, making it suitable for above-ground and underground applications. This product is manufactured as conduit and elbows. Offered as Atkore brands Allied Tube & Conduit, Heritage Plastics, and Queen City Plastics.

Further information can be found at: <https://www.atkore.com/Products/Conduit/PVC-Conduit/PVC-Schedule-40-Rigid-Conduit>

<https://www.atkore.com/Products/Conduit/PVC-Conduit/PVC-Schedule-80-Rigid-Conduit>

Product Information

Declared Unit: 1 m of conduit product

Mass: 3.42 kg

Product Specificity: Product Average

Product Specific

Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

Atkore



Averaging:

This EPD covers Schedule 40 and Schedule 80 solid wall rigid PVC conduit products manufactured by Atkore including straight conduit, elbows and sweeps at trade sizes greater than or equal to 2 inches. It is a product-average, manufacturer-average EPD, that is a declaration of an average product as an average from several of the manufacturer's plants. Product variations include differences in inner and outer diameter, wall thickness, length, bends, colors and labels. In particular, both Schedule 40 and Schedule 80 solid wall conduit are represented in this EPD.

Data tables, including product and packaging components, LCIA indicators, and other non-LCIA inventory metrics are reported for the production-weighted average of solid wall PVC products within the specified trade-size range offered by Atkore. Values were normalized to the mass of conduit products and averaging was weighted by the total production mass of each product.



Results in this EPD are reported per declared unit (1 m) of Schedule 40 solid wall PVC conduit products of trade size 4". The data tables were calculated by multiplying the mass-normalized average values by the linear density of 4" Schedule 40 solid wall PVC conduit, as described in the PCR. Details on extrapolating results to other conduit types and trade sizes are provided in the section on Environmental Impacts.

Products in this category undergo primary manufacturing at nine facilities belonging to Atkore. There are no secondary manufacturing facilities for PVC conduit. The entire production of Schedule 40 and Schedule 80 solid wall PVC conduit products manufactured during the reference year with a trade size greater than or equal to 2" was included in the LCA study. This comprises all products manufactured across all relevant plants.

Variation in GWP Result (Products): -11.59% to +9.83%

Variation in GWP Result (Facilities): -61.5% to +41.09%

Plants

-  Atkore
1206 Sunset Dr, Thomasville, GA 31792, USA
-  Atkore
4950 McKennon Rd, Pendleton, OR 97801, USA
-  Atkore
189 Heritage Park Dr, Milford, UT 84751, USA
-  Atkore
1202 N Bowie Dr, Weatherford, TX 76086, USA
-  Atkore
6700 Enterprise Dr, Louisville, KY 40214, USA
-  Atkore
5128 W Hanna Ave, Tampa, FL 33634, USA
-  Atkore
958 U.S. 11, Kirkwood, NY 13795, USA
-  Atkore
2220 Nugget Way, Eugene, OR 97403, USA
-  Atkore
2650 Bennett Rd, Fort Mill, SC 29715, USA

Product Specifications

Product SKU(s): 4" Schedule 40 solid wall rigid PVC conduit

Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

Atkore



| | |
|--------------------------------------|---|
| Product Classification Codes: | EC3 - UtilityPiping Masterformat - SECTION 26 05 33.13 |
| Outer diameter: | 1.14E+02 mm |
| Inner diameter: | 1.01E+02 mm |
| Wall thickness: | 6.02E+00 mm |
| Material density: | 1423 kg/m ³ |
| Mass per meter: | 3.42E+00 kg |
| Performance standards: | UL Std 651 (excluding 8"), NEMA Std TC 2, CSA Std C22.2 No. 211.2 |

Material Composition

| Material/Component Category | Origin | % Mass |
|-----------------------------|--------|--------|
| PVC resin | None | 51.4 |
| Recycled PVC material | None | 23.3 |
| Calcium carbonate | None | 23.2 |
| Additives | None | 2.17 |

| Packaging Material | Origin | kg Mass |
|--------------------|--------|----------|
| Lumber | None | 3.40E-03 |
| PET banding | None | 1.68E-03 |

| Biogenic Carbon Content | kg C per m of conduit product |
|---|-------------------------------|
| Biogenic carbon content in product | None |
| Biogenic carbon content in accompanying packaging | 0.0823 |

| Hazardous Materials |
|--|
| No regulated hazardous or dangerous substances are included in this product. |

EPD Data Specificity

- Primary Data Year: 2021
- Manufacturing Specificity:
- Industry Average
 - Manufacturer Average
 - Facility Specific

Software and LCI Data Sources

- LCA Software: SimaPro v. 9.5
- LCI Foreground Database(s): Ecoinvent v. 3.9.1 | Cut-off | DATASMART LCI Package v. 2021 | Cut-off
- LCI Background Database(s): Ecoinvent v. 3.9.1 | Cut-off | Ecoinvent v. 2 | Cut-off

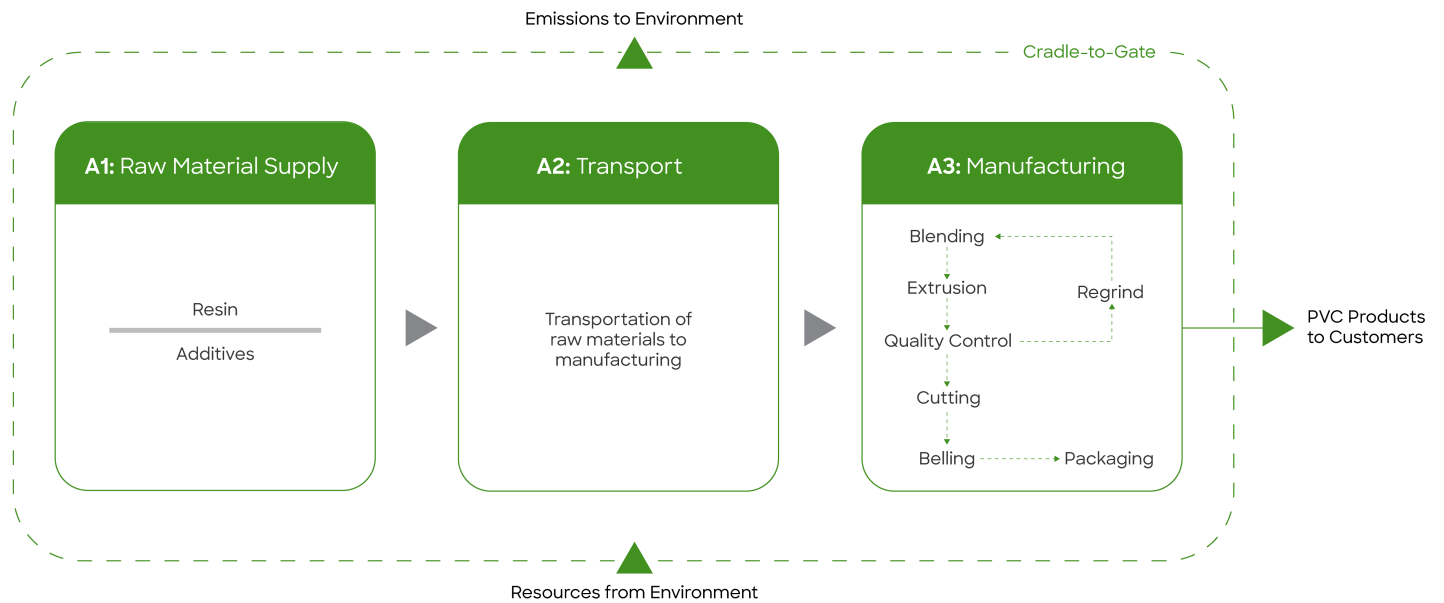
Renewable Electricity

Renewable electricity is used: No

System Boundary

| | | | |
|---|----|-------------------------------------|----|
| Production | A1 | Raw material supply | ✓ |
| | A2 | Transport | ✓ |
| | A3 | Manufacturing | ✓ |
| Construction | A4 | Transport to site | ND |
| | A5 | Assembly / Install | ND |
| Use | B1 | Use | ND |
| | B2 | Maintenance | ND |
| | B3 | Repair | ND |
| | B4 | Replacement | ND |
| | B5 | Refurbishment | ND |
| | B6 | Operational Energy Use | ND |
| | B7 | Operational Water Use | ND |
| End of Life | C1 | Deconstruction | ✓ |
| | C2 | Transport | ✓ |
| | C3 | Waste Processing | ✓ |
| | C4 | Disposal | ✓ |
| Benefits & Loads Beyond System Boundary | D | Recycling, Reuse Recovery Potential | ✓ |

Product Flow Diagram



Life Cycle Module Descriptions

A1, extraction and upstream production

The information module “extraction and upstream production” covers raw material extraction and processing and processing of secondary material input (e.g. recycling processes). This is inclusive of generation of electricity, steam and heat from energy resources used for extraction and processing of raw materials, including their extraction, refining and transport.

In PVC conduit manufacturing, A1 includes all upstream impacts associated with the production of raw materials used, including PVC resin, calcium carbonate and additives. In particular, the impacts associated with recycling PVC material to be used in conduit manufacturing are included in A1.

A2, transport to factory

The information module “transport to factory” covers transport of raw materials and other inputs from the supplier to the factory. Primary data was collected on transport distances and modes for this project. Where more than one supplier provided identical raw materials, a mass-weighted average distance was determined per mode. Average distances apply to the entire quantity of supplied materials, inclusive of any excess weight required to account for yield losses.

Impacts from the A2 stage are driven by the transport of the major components of PVC conduit manufacturing by weight. These are PVC resin with an average distance of 30 kilometers by truck and 2110 kilometers by rail, calcium carbonate with an average distance of 535 kilometers by truck, and recycled PVC material with an average distance of 813 kilometers by truck.

A3, manufacturing

The information module “manufacturing” includes:

- production of ancillary materials or pre-products
- generation of electricity, steam and heat from primary energy resources used in manufacturing, including their extraction, refining and transport
- manufacturing of products and co-products, including their extraction, manufacturing and transport
- manufacturing of packaging, including their extraction, manufacturing and transport
- waste management from manufacturing packaging and manufacturing wastage including transport up to the recycler or disposal

Manufacturing of PVC rigid conduit products includes several processing steps:

1. PVC resin is blended with additives and stored in holding silos.

2. This mixture is fed into the extruder lines for pipe forming.
3. The extruded conduit is cooled with water and air.
4. Conduit is assessed for quality and off-spec parts are sent to be ground and recycled into new product.
5. The on-spec pipe is cut to length.
6. Conduit may receive additional processing such as beelling of the ends or bending into elbows.
7. The finished product is strapped together in bundles with polyester strapping and wooden frames. The packages are stacked for storage prior to shipment.
8. 100% of scrap produced at factories is recycled.

LCA Discussion

Allocation Procedure

The inputs and outputs to the manufacturing plant are allocated per the stepwise method detailed in ISO 21930, Section 7.2.4, 7.2.5, and 7.2.6. Most plant inputs and outputs are assigned across total production (inclusive of Schedule 40 and Schedule 80 PVC conduit products and other products) using mass-based allocation. Subdivision for product and packaging raw material inputs and scrap amounts was made possible through product bills of materials (BOMs). No co-products are generated in conduit manufacturing requiring allocation.

This study uses the cut-off approach method for recycling. According to this approach, the first life of a material bears the environmental burdens of its production (e.g., raw material extraction and processing) and the second life (e.g., scrap input) bears the burdens of refurbishment (e.g., collection and refining of scrap). The burdens from waste treatment are taken on by the next life of the product and not included in this study. Potential environmental benefits and burdens related to recycled materials are addressed in information module D.

Cut-off Procedure

For the processes within the system boundary, all energy and material flows were included in the model. No known flows were excluded. All upstream and downstream activities were included using a combination of primary and secondary data. While the majority of inventory data were sourced from primary resources, representative proxies were used to close gaps in the absence of primary data.

Data Quality Discussion

Foreground data were sourced from primary information provided by the Atkore and suppliers and has been reviewed by TrueNorth Collective to ensure precision and completeness. In order to balance out seasonal variations, operations data over a 12-month period, corresponding to the 2021 calendar year, was used to represent production activities. In addition, key model inputs such as mass balance, energy balance and emission inventory were reviewed by the Parallel and TrueNorth Collective teams.

As all facilities involved in PVC manufacturing were included in this study, full representativeness of primary data was achieved in terms of geography, technology and production scale. There exists significant variations in impact for the same products across multiple plants. With 9 manufacturing facilities, there are important differences in manufacturing equipment, which can cause disparity in formulation processing aspects. Despite difference in equipment and formulation, values are reported as a manufacturer-average since the manufacturing processes are the same across facilities, and there is no distinction between the product produced.

Ecoinvent v3.9.1 was used as the main database for background data. This version was published in 2023. Ecoinvent is widely used in research and industry to support life cycle assessment practices. Each version of this database goes through thorough review process and documentation of precision and completeness is available by the provider. DATASMART v2021 was used for US state specific manufacturing electricity. DATASMART is based on the US electricity grid in 2018. Both ecoinvent and DATASMART use the cut-off approach to allocation of materials for recycling.

Assessment of data quality, representativeness, and potential sources of uncertainty is performed using the Enhanced Pedigree Matrix proposed in the guidance for "Assessing Data Quality of Background Life Cycle Inventory (LCI) Datasets" published by the ACLCA in 2022. No major concerns were found to exist regarding data quality. Minor data gaps in packaging quantities and supplier transportation distances were resolved using estimates from related flows or expert judgement. Secondary data were assessed and deemed to be adequate for temporal, geographical and technological representativeness. Per the PCR, the background process chosen to represent PVC resin was based on the most recent American Chemistry Council report, which comprises PVC production data from plants based in the United States.

Results

Environmental Impact Assessment Results

TRACI 2.1

per 1 m of conduit product.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

| Impact Category | Method | Unit | A1 | A2 | A3 | A1A2A3 | C1 | C2 | C3 | C4 | D |
|-----------------|-----------|--------------|---------|----------|---------|---------|----|-----------|----|----------|---------|
| GWP-total | TRACI 2.1 | kg CO2 eq | 5.13 | 0.422 | 1.07 | 6.62 | ND | 0.0524 | ND | 0.252 | 1.97 |
| ODP | TRACI 2.1 | kg CFC 11 eq | 6.49e-7 | 6.69e-9 | 5.75e-8 | 7.13e-7 | ND | 8.93e-10 | ND | 1.05e-9 | 8.49e-7 |
| AP | TRACI 2.1 | kg SO2 eq | 0.015 | 0.00287 | 0.00386 | 0.0217 | ND | 0.000225 | ND | 0.000785 | 0.00756 |
| EP | TRACI 2.1 | kg N eq | 0.00713 | 0.000523 | 0.00208 | 0.00973 | ND | 0.0000505 | ND | 0.0271 | 0.00478 |
| POCP | TRACI 2.1 | kg O3 eq | 0.191 | 0.0829 | 0.0373 | 0.311 | ND | 0.00583 | ND | 0.00665 | 0.0963 |

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particulate Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

The minimum system boundary per the PCR is cradle-to-gate with modules A1-A3, covering supplied raw materials (A1), transport from suppliers to Atkore (A2), and production of manufactured products (A3). Additionally, for conduit products which are not buried or encased in concrete, the end-of-life stage should be declared, encompassing modules C1 (deconstruction), C2 (transport), C3 (waste processing), and C4 (disposal). Module D must also be declared, specifying potential loads and benefits of secondary material, secondary fuel or recovered energy leaving the product system based on scenarios.

The conduit products referenced in this EPD may be used in applications where they are buried or encased in concrete but may also be used for other applications. A cradle-to-gate with end-of-life system boundary was thus adopted for the study. In cases where the user or reader wishes to apply the findings to a buried/encased application, they may leverage the cradle-to-gate results.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

Atkore



Resource Use Indicators

per 1 m of conduit product.

| Indicator | Unit | A1 | A2 | A3 | A1A2A3 | C1 | C2 | C3 | C4 | D |
|-----------|----------------|--------|---------|--------|--------|----|----------|----|----------|---------|
| RPRE | MJ, LHV | 1.86 | 0.111 | 2.27 | 4.24 | ND | 0.00984 | ND | 0.0158 | 1.55 |
| RPRM | MJ, LHV | ND | ND | 0.749 | 0.749 | ND | ND | ND | ND | ND |
| RPRT | MJ, LHV | 1.86 | 0.111 | 3.02 | 4.99 | ND | 0.00984 | ND | 0.0158 | 1.55 |
| NRPRE | MJ, LHV | 75.7 | 5.98 | 18.3 | 100 | ND | 0.796 | ND | 0.931 | 44.9 |
| NRPRM | MJ, LHV | 37.6 | ND | 0.0357 | 37.6 | ND | ND | ND | ND | 17.5 |
| NRPRT | MJ, LHV | 113 | 5.98 | 18.3 | 137 | ND | 0.796 | ND | 0.931 | 62.4 |
| SM | kg | 0.795 | ND | ND | 0.795 | ND | ND | ND | ND | ND |
| RSF | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NRSF | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| RE | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ADPF | MJ, LHV | 14 | 0.762 | 1.41 | 16.2 | ND | 0.105 | ND | 0.121 | 5.15 |
| FW | m ³ | 0.0494 | 0.00092 | 0.0172 | 0.0675 | ND | 0.000111 | ND | 0.000899 | -0.0266 |

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRM or PENRT = Total non-renewable primary resources with energy content, SM: Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

Waste and Output Flow Indicators

per 1 m of conduit product.

| Indicator | Unit | A1 | A2 | A3 | A1A2A3 | C1 | C2 | C3 | C4 | D |
|-----------|---------|----|----|-----------|-----------|----|----|----|------|----|
| HWD | kg | ND | ND | 0.0000961 | 0.0000961 | ND | ND | ND | ND | ND |
| NHWD | kg | ND | ND | ND | ND | ND | ND | ND | 3.42 | ND |
| HLRW | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ILLRW | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| CRU | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| MFR | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| MER | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EE | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

Solid Wall PVC Conduit of Trade Sizes Greater Than or Equal to 2"

Atkore



Carbon Emissions and Removals

per 1 m of conduit product.

| Indicator | Unit | A1 | A2 | A3 | A1A2A3 | A5 | C1 | C2 | C3 | C4 | D |
|-----------|--------|----|----|--------|--------|--------|----|----|----|----|---------|
| BCRK | kg CO2 | ND | ND | 0.0823 | 0.0823 | ND | ND | ND | ND | ND | -0.0165 |
| BCEK | kg CO2 | ND | ND | ND | ND | 0.0658 | ND | ND | ND | ND | ND |

Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

The biogenic removals and emissions are determined following the ACLCA Guidance to Calculating Non-LCIA Inventory Metrics in Accordance with ISO 21930:2017.

Biogenic carbon removals in information module A3 stem from the supply of lumber used to secure conduit in "frames". Assumed recycling rates of this packaging was 20%, taken from the PCR Part A. Emissions in module A5 come from the proportional part of the frames which is landfilled and/or incinerated. The negative removal in module D shows the biogenic carbon leaving the system through recycling. There is a net zero flow of biogenic carbon across all information modules: all biogenic carbon which enters the system in A3 is either emitted in A5 or exits the system in module D.

Impact Scaling Factors

| Trade Size | Outer Diameter (mm) | Inner Diameter (mm) | Minimum Wall Thickness (mm) | Linear Density (kg per m) | Scaling Factor (per m) | Scaling Factor (per 10 ft) |
|--------------------|---------------------|---------------------|-----------------------------|---------------------------|------------------------|----------------------------|
| Schedule 40 2" | 6.03E+01 | 5.13E+01 | 3.91E+00 | 1.09E+00 | 3.18E-01 | 9.71E-01 |
| Schedule 40 2-1/2" | 7.30E+01 | 6.13E+01 | 5.16E+00 | 1.73E+00 | 5.05E-01 | 1.54E+00 |
| Schedule 40 3" | 8.89E+01 | 7.64E+01 | 5.49E+00 | 2.40E+00 | 7.02E-01 | 2.14E+00 |
| Schedule 40 3-1/2" | 1.02E+02 | 8.85E+01 | 5.74E+00 | 2.89E+00 | 8.44E-01 | 2.57E+00 |
| Schedule 40 4" | 1.14E+02 | 1.01E+02 | 6.02E+00 | 3.42E+00 | 1.00E+00 | 3.05E+00 |
| Schedule 40 5" | 1.41E+02 | 1.26E+02 | 6.55E+00 | 4.63E+00 | 1.35E+00 | 4.13E+00 |
| Schedule 40 6" | 1.68E+02 | 1.52E+02 | 7.11E+00 | 6.01E+00 | 1.76E+00 | 5.36E+00 |
| Schedule 40 8" | 2.19E+02 | 1.99E+02 | 8.18E+00 | 9.05E+00 | 2.65E+00 | 8.07E+00 |
| Schedule 80 2" | 6.03E+01 | 4.78E+01 | 5.54E+00 | 1.50E+00 | 4.38E-01 | 1.34E+00 |
| Schedule 80 2-1/2" | 7.30E+01 | 5.72E+01 | 7.01E+00 | 2.28E+00 | 6.68E-01 | 2.04E+00 |
| Schedule 80 3" | 8.89E+01 | 7.16E+01 | 7.62E+00 | 3.06E+00 | 8.94E-01 | 2.72E+00 |
| Schedule 80 3-1/2" | 1.02E+02 | 8.33E+01 | 8.08E+00 | 3.73E+00 | 8.94E-01 | 3.32E+00 |
| Schedule 80 4" | 1.14E+02 | 9.49E+01 | 9.58E+00 | 4.66E+00 | 1.36E+00 | 4.15E+00 |
| Schedule 80 5" | 1.41E+02 | 1.20E+02 | 9.53E+00 | 6.46E+00 | 1.89E+00 | 5.76E+00 |
| Schedule 80 6" | 1.68E+02 | 1.43E+02 | 1.10E+01 | 8.88E+00 | 2.60E+00 | 7.92E+00 |
| Schedule 80 8" | 2.19E+02 | 1.89E+02 | 1.27E+01 | 1.35E+01 | 3.95E+00 | 1.20E+01 |

The results in this EPD are reported for 1 m (the declared unit) of 4" Schedule 40 solid wall rigid PVC conduit (the reference product). Environmental impacts of other types and trade sizes (product-specific results) can be calculated using the equation $Results_PS = Results_Ref \times Multiplier_PS$ where Results_PS is the product-specific result per declared unit, Results_Ref is the result per declared unit of the reference product and Multiplier_PS is the product-specific declared unit multiplier.

The impact scaling factor table provides the product-specific declared unit multipliers, Multiplier_PS (marked as "Scaling Factor" in the table), which are calculated as (specific product's mass per declared unit)/(reference product's mass per declared unit), that is, the quotient between the linear density of a specific type and trade size and that of 4" Schedule 40 solid wall rigid PVC conduit. Scaling factors are also provided for calculating impacts per 10-foot section of conduit.

This calculation method can be used to derive a result for any or all declared indicators and for any reported life module(s). When using this equation, the EPD user defines which indicator and life cycle stage(s) they are using to calculate a product-specific result. The Results_PS and Results_Ref values must align with the same indicator and life cycle stage(s) included.

Scenarios

End of Life

C1 - C4 Modules

Collection Process

Collected with Mixed Construction Waste: 3.42 kg

Recovery

Landfill: 3.42 kg

Disposal

Product or Material for Final Disposal: 3.42 kg

Removals of Biogenic Carbon: 0.0823 kg CO₂

Assumptions for scenario development:

C1, deconstruction/demolition includes dismantling or demolition, of the construction product from the construction works and the energy use for this, including initial on-site sorting of the materials. For conduit, removal at the end of life requires only human labor and does not contribute to lifetime environmental impacts.

C2, transportation to waste processing or disposal, includes the transportation of the discarded construction product as part of the waste processing, for example to a recycling site and transportation of waste, for example to final disposal. Per the PCR, transport was assumed to be 100 kilometers by truck.

C3, waste processing, which includes, for example collection of waste fractions from the deconstruction, recovery and waste processing of material flows resulting in materials for reuse, secondary materials, secondary fuels or export of recovered energy. As conduit is not recycled, the C3 modules is included but has zero impacts.

C4, disposal of waste which includes physical pre-treatment and management of the disposal site, including provision and transport of all materials, products and related energy and water use. Per the PCR, conduit was assumed to be landfilled at End of Life.

Reuse, Recovery and / or Recycling Potentials & Relevant Scenario Information

D Module

Recycled Content of Product: 23.3 %

Further assumptions for scenario development:

Module D information declares potential loads and benefits of secondary material, secondary fuel or recovered energy leaving the product system based on scenarios. The impacts associated with module D are calculated by identifying the point of substituted functional equivalence where the secondary material substitutes primary production and subtracting the impacts resulting from the substituted production of the product.

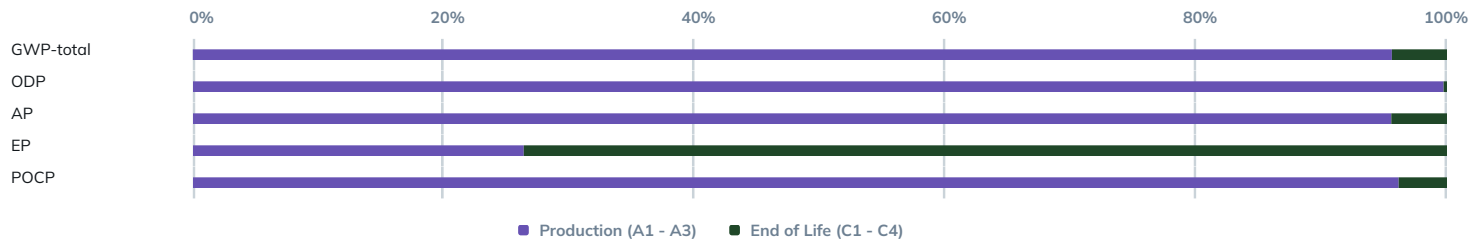
For PVC conduit, recycled PVC used in the product is accounted for in module D. Since more recycled PVC is used as an input than is produced at the manufacturing sites, there is a net flow of recycled material into the system. This net input flow is treated as a negative net output flow.

There are no other flows of recovered materials out from the PVC conduit product system. Although PVC is recyclable, the PCR specifies a product recycling rate of 0% for "other materials", under which PVC is classified.

In addition, biogenic carbon removals associated with packaging materials leaving the system boundary through recycling during A5 are declared in module D.

Interpretation

The contribution analysis indicates that the majority of the potential impacts occur as a result of raw material supply (A1) with an important contribution coming also from supplier transport (A2) and manufacturing (A3). PVC resin is the main material contributing to impacts in A1. The exception is for the impact category "Eutrophication Potential", where direct emissions from landfilling the conduit at end of life (C4) is the major driver.



Additional Environmental Information

Atkore PVC conduit does not contain any substances identified as hazardous according to the normative requirements in standards or regulations applicable in the markets where they are sold, and the additional standards listed in PCR Part A 8.4.1.

Atkore PVC conduit does not release any dangerous substances as classified by the standards listed in PCR Part A 8.4.1.

Further Information

Secondary data contributing >30% to disclosed environmental impact categories.

| Component or Input | Dataset Used | Database |
|--------------------|---|------------------|
| PVC Resin | Custom dataset modeled after the 2021 report, prepared by Franklin Associates, entitled Cradle-to-Gate Life Cycle Analysis of Polyvinyl (PVC) Resin | Custom |
| Electricity | Various state-specific grid mixes from DATAS-MART LCI Package | DATAS-MART v2021 |
| Truck Transport | Transport, freight, lorry, unspecified {RoW} market for transport, freight, lorry, unspecified Cut-off, U | ecoinvent 3.9.1 |
| Landfilling of PVC | Waste polyvinylchloride {RoW} treatment of waste polyvinylchloride, sanitary landfill Cut-off, U | ecoinvent 3.9.1 |

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ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017, OPT. EN 15804+A2

SmartEPD-2024-021-0123-01

Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"



Date of Issue:
May 14, 2024

Expiration:
May 14, 2029

Last updated:
May 14, 2024



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Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"

Atkore



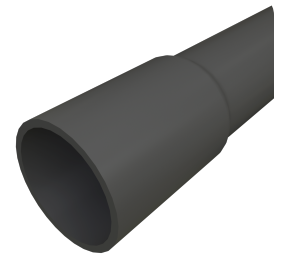
General Information

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| | |
|-----------------------------|---|
| Product Name: | Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2" |
| Declared Unit: | 1 m of conduit product |
| Declaration Number: | SmartEPD-2024-021-0123-01 |
| Date of Issue: | May 14, 2024 |
| Expiration: | May 14, 2029 |
| Last updated: | May 14, 2024 |
| EPD Scope: | Cradle to gate with other options A1 - A3, C1 - C4, D |
| Market(s) of Applicability: | North America |

Reference Standards

| | |
|--------------------------------|---|
| Standard(s): | ISO 14025 and ISO 21930:2017, opt. EN 15804+A2 |
| Core PCR: | Smart EPD® Part A Product Category Rules for Building and Construction Products and Services v.1.01, ISO 21930:2017 Date of issue: January 15, 2024 |
| Sub-category PCR: | Smart EPD® Part B PCR for Electrical and Telecommunications Conduit v.1 Date of issue: January 31, 2024 Valid until: January 31, 2029 |
| Sub-category PCR review panel: | 📄 Contact Smart EPD for more information. |
| General Program Instructions: | 📄 Smart EPD General Program Instructions v.1.0, November 2022 |

Verification Information

| | |
|------------------------------|--|
| ACLCA PCR Guidance Version: | 2022 ACLCA PCR Guidance Process and Methods Toolkit version 1.0 |
| ACLCA PCR Conformance Level: | Transparency |
| LCA Author/Creator: | 🌐 Matthew Neiman ✉️ matt.neiman@truenorthcollective.net |
| EPD Program Operator: | 📄 Smart EPD ✉️ info@smartepd.com 🌐 www.smartepd.com 📍 585 Grove St., Ste. 145 PMB 966, Herndon, VA 20170, USA |

Verification:

Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071 :

External

🌐 Nicole Kennard | 🏢 Consultant | ✉ nicolejjk.17@gmail.com

Independent external verification of EPD, according to ISO 14025 and reference PCR(s) :

External

🌐 Nicole Kennard | 🏢 Consultant | ✉ nicolejjk.17@gmail.com

Limitations, Liability, and Ownership

The EPD owner has sole ownership, liability, and responsibility for the EPD.

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of products using EPD information shall be based on the product's use and impacts at the building or construction works level, and therefore EPDs may not be used for comparability purposes when not considering the whole building life cycle. EPD comparability is only possible when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences in results upstream or downstream of the life cycle stages declared.

The environmental impact results of products in this document are based on a declared unit and therefore do not provide sufficient information to establish comparisons. The results shall not be used for comparisons without knowledge of how the physical properties of the product impact the precise function at the construction level. The environmental impact results shall be converted to a functional unit basis before any comparison is attempted.

Organization Information

Atkore is a leading manufacturer of electrical and critical infrastructure products for commercial, industrial, data center, telecommunications, water, and solar applications. Significant product categories include metal conduit, plastic conduit, electrical cable and flexible conduit, metal framing, and cable management systems.

Further information can be found at: <https://www.atkore.com/>

Product Description

PVC Schedule 40 and Schedule 80 Rigid Conduit is non-corrosive, and non-conductive. Atkore's PVC Rigid Conduit conforms to UL 651 (excluding 8") and NEMA TC 2, making it suitable for above-ground and underground applications. Offered as Atkore brands Allied Tube & Conduit, Heritage Plastics, and Queen City Plastics.

Further information can be found at: <https://www.atkore.com/Products/Conduit/PVC-Conduit/PVC-Schedule-40-Rigid-Conduit>
<https://www.atkore.com/Products/Conduit/PVC-Conduit/PVC-Schedule-80-Rigid-Conduit>

Product Information

| | |
|----------------------|------------------------|
| Declared Unit: | 1 m of conduit product |
| Mass: | 0.486 kg |
| Product Specificity: | ✓ Product Average |
| | ✗ Product Specific |

Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"

Atkore



Averaging:

This EPD covers Schedule 40 and Schedule 80 solid wall rigid PVC conduit products manufactured by Atkore including straight conduit, elbows and sweeps at trade sizes smaller than or equal to 1 and a half inches. It is a product-average, manufacturer-average EPD, that is a declaration of an average product as an average from several of the manufacturer's plants. Product variations include differences in inner and outer diameter, wall thickness, length, bends, colors and labels. In particular, both Schedule 40 and Schedule 80 solid wall conduit are represented in this EPD.








Data tables, including product and packaging components, LCIA indicators, and other non-LCIA inventory metrics are reported for the production-weighted average of solid wall PVC products within the specified trade-size range offered by Atkore. Values were normalized to the mass of conduit products and averaging was weighted by the total production mass of each product.

Results in this EPD are reported per declared unit (1 m) of Schedule 40 solid wall PVC conduit products of trade size 1". The data tables were calculated by multiplying the mass-normalized average values by the linear density of 1" Schedule 40 solid wall PVC conduit, as described in the PCR. Details on extrapolating results to other conduit types and trade sizes are provided in the section on Environmental Impacts.

Products in this category undergo primary manufacturing at nine facilities belonging to Atkore. There are no secondary manufacturing facilities for PVC conduit. The entire production of Schedule 40 and Schedule 80 solid wall PVC conduit products manufactured during the reference year with a trade size less than or equal to 1 1/2" was included in the LCA study. This comprises all products manufactured across all relevant plants.

| | |
|--|--------------------|
| Variation in GWP Result (Products): | -7.05% to +5.83% |
| Variation in GWP Result (Facilities): | -17.31% to +12.14% |

Plants

-  Atkore
1206 Sunset Dr, Thomasville, GA 31792, USA
-  Atkore
2220 Nugget Way, Eugene, OR 97403, USA
-  Atkore
958 U.S. 11, Kirkwood, NY 13795, USA
-  Atkore
5128 W Hanna Ave, Tampa, FL 33634, USA
-  Atkore
6700 Enterprise Dr, Louisville, KY 40214, USA
-  Atkore
1202 N Bowie Dr, Weatherford, TX 76086, USA
-  Atkore
189 Heritage Park Dr, Milford, UT 84751, USA
-  Atkore
4950 McKennon Rd, Pendleton, OR 97801, USA
-  Atkore
2650 Bennett Rd, Fort Mill, SC 29715, USA

Product Specifications

Product SKU(s): 1" Schedule 40 solid wall rigid PVC conduit

Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"

Atkore



| | |
|--------------------------------------|---|
| Product Classification Codes: | EC3 - UtilityPiping Masterformat - SECTION 26 05 33.13 |
| Outer diameter: | 3.34E+01 mm |
| Inner diameter: | 2.55E+01 mm |
| Wall thickness: | 3.38E+00 mm |
| Material density: | 1423 kg/m ³ |
| Mass per meter: | 4.86E-01 kg |
| Performance standards: | UL Std 651, NEMA Std TC 2, CSA Std C22.2 No. 211.2 |

Material Composition

| Material/Component Category | Origin | % Mass |
|-----------------------------|--------|--------|
| PVC resin | None | 80.34 |
| Recycled PVC material | None | 1.36 |
| Calcium carbonate | None | 14.69 |
| Additives | None | 3.61 |

| Packaging Material | Origin | kg Mass |
|--------------------|--------|----------|
| Lumber | None | 4.95E-04 |
| PET banding | None | 2.38E-04 |

| Biogenic Carbon Content | kg C per m of conduit product |
|---|-------------------------------|
| Biogenic carbon content in product | None |
| Biogenic carbon content in accompanying packaging | 0.012 |

| Hazardous Materials |
|--|
| No regulated hazardous or dangerous substances are included in this product. |

EPD Data Specificity

| | |
|----------------------------|--|
| Primary Data Year: | 2021 |
| Manufacturing Specificity: | <input type="checkbox"/> Industry Average |
| | <input checked="" type="checkbox"/> Manufacturer Average |
| | <input type="checkbox"/> Facility Specific |

Software and LCI Data Sources

| | |
|-----------------------------|--|
| LCA Software: | <input checked="" type="checkbox"/> SimaPro v. 9.5 |
| LCI Foreground Database(s): | <input checked="" type="checkbox"/> Ecoinvent v. 3.9.1 <input type="checkbox"/> Cut-off <input checked="" type="checkbox"/> DATASMART LCI Package v. 2021 <input type="checkbox"/> Cut-off |
| LCI Background Database(s): | <input checked="" type="checkbox"/> Ecoinvent v. 3.9.1 <input type="checkbox"/> Cut-off <input checked="" type="checkbox"/> Ecoinvent v. 2 <input type="checkbox"/> Cut-off |

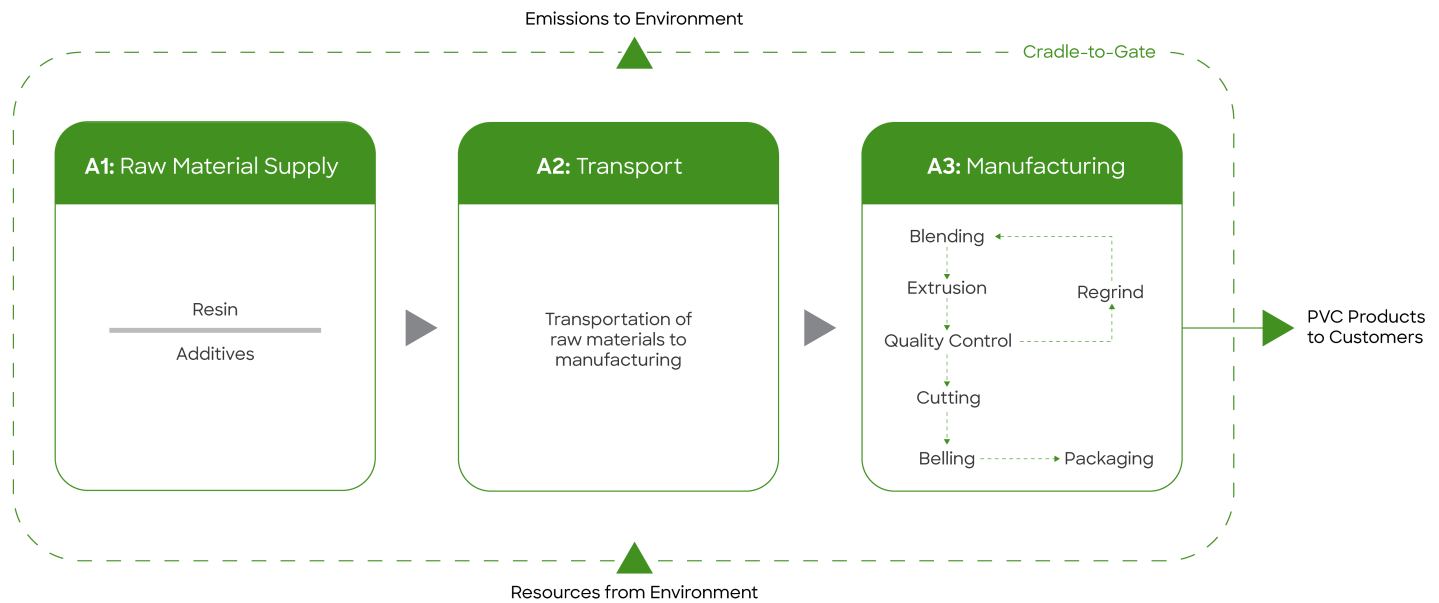
Renewable Electricity

| | |
|--------------------------------|----|
| Renewable electricity is used: | No |
|--------------------------------|----|

System Boundary

| | | | |
|---|----|-------------------------------------|----|
| Production | A1 | Raw material supply | ✓ |
| | A2 | Transport | ✓ |
| | A3 | Manufacturing | ✓ |
| Construction | A4 | Transport to site | ND |
| | A5 | Assembly / Install | ND |
| Use | B1 | Use | ND |
| | B2 | Maintenance | ND |
| | B3 | Repair | ND |
| | B4 | Replacement | ND |
| | B5 | Refurbishment | ND |
| | B6 | Operational Energy Use | ND |
| | B7 | Operational Water Use | ND |
| End of Life | C1 | Deconstruction | ✓ |
| | C2 | Transport | ✓ |
| | C3 | Waste Processing | ✓ |
| | C4 | Disposal | ✓ |
| Benefits & Loads Beyond System Boundary | D | Recycling, Reuse Recovery Potential | ✓ |

Product Flow Diagram



Life Cycle Module Descriptions

A1, extraction and upstream production

The information module "extraction and upstream production" covers raw material extraction and processing and processing of secondary material input (e.g. recycling processes). This is inclusive of generation of electricity, steam and heat from energy resources used for extraction and processing of raw materials, including their extraction, refining and transport.

In PVC conduit manufacturing, A1 includes all upstream impacts associated with the production of raw materials used, including PVC resin, calcium carbonate and additives. In particular, the impacts associated with recycling PVC material to be used in conduit manufacturing are included in A1.

A2, transport to factory

The information module "transport to factory" covers transport of raw materials and other inputs from the supplier to the factory. Primary data was collected on transport distances and modes for this project. Where more than one supplier provided identical raw materials, a mass-weighted average distance was determined per mode. Average distances apply to the entire quantity of supplied materials, inclusive of any excess weight required to account for yield losses.

Impacts from the A2 stage are driven by the transport of the major components of PVC conduit manufacturing by weight. These are PVC resin with an average distance of 12 kilometers by truck and 2050 kilometers by rail, calcium carbonate with an average distance of 594 kilometers by truck, and recycled PVC material with an average distance of 852 kilometers by truck.

A3, manufacturing

The information module "manufacturing" includes:

- production of ancillary materials or pre-products
- generation of electricity, steam and heat from primary energy resources used in manufacturing, including their extraction, refining and transport
- manufacturing of products and co-products, including their extraction, manufacturing and transport
- manufacturing of packaging, including their extraction, manufacturing and transport
- waste management from manufacturing packaging and manufacturing wastage including transport up to the recycler or disposal

Manufacturing of PVC rigid conduit products includes several processing steps:

1. PVC resin is blended with additives and stored in holding silos.

2. This mixture is fed into the extruder lines for pipe forming.
3. The extruded conduit is cooled with water and air.
4. Conduit is assessed for quality and off-spec parts are sent to be ground and recycled into new product.
5. The on-spec pipe is cut to length.
6. Conduit may receive additional processing such as belling of the ends or bending into elbows.
7. The finished product is strapped together in bundles with polyester strapping and wooden frames. The packages are stacked for storage prior to shipment.
8. 100% of scrap produced at factories is recycled.

LCA Discussion

Allocation Procedure

The inputs and outputs to the manufacturing plant are allocated per the stepwise method detailed in ISO 21930, Section 7.2.4, 7.2.5, and 7.2.6. Most plant inputs and outputs are assigned across total production (inclusive of Schedule 40 and Schedule 80 PVC conduit products and other products) using mass-based allocation. Subdivision for product and packaging raw material inputs and scrap amounts was made possible through product bills of materials (BOMs). No co-products are generated in conduit manufacturing requiring allocation.

This study uses the cut-off approach method for recycling. According to this approach, the first life of a material bears the environmental burdens of its production (e.g., raw material extraction and processing) and the second life (e.g., scrap input) bears the burdens of refurbishment (e.g., collection and refining of scrap). The burdens from waste treatment are taken on by the next life of the product and not included in this study. Potential environmental benefits and burdens related to recycled materials are addressed in information module D.

Cut-off Procedure

For the processes within the system boundary, all energy and material flows were included in the model. No known flows were excluded. All upstream and downstream activities were included using a combination of primary and secondary data. While the majority of inventory data were sourced from primary resources, representative proxies were used to close gaps in the absence of primary data.

Data Quality Discussion

Foreground data were sourced from primary information provided by the Atkore and suppliers and has been reviewed by TrueNorth Collective to ensure precision and completeness. In order to balance out seasonal variations, operations data over a 12-month period, corresponding to the 2021 calendar year, was used to represent production activities. In addition, key model inputs such as mass balance, energy balance and emission inventory were reviewed by the Parallel and TrueNorth Collective teams.

As all facilities involved in PVC manufacturing were included in this study, full representativeness of primary data was achieved in terms of geography, technology and production scale. There exists significant variations in impact for the same products across multiple plants. With 9 manufacturing facilities, there are important differences in manufacturing equipment, which can cause disparity in formulation processing aspects. Despite difference in equipment and formulation, values are reported as a manufacturer-average since the manufacturing processes are the same across facilities, and there is no distinction between the product produced.

Ecoinvent v3.9.1 was used as the main database for background data. This version was published in 2023. Ecoinvent is widely used in research and industry to support life cycle assessment practices. Each version of this database goes through thorough review process and documentation of precision and completeness is available by the provider. DATASMART v2021 was used for US state specific manufacturing electricity. DATASMART is based on the US electricity grid in 2018. Both ecoinvent and DATASMART use the cut-off approach to allocation of materials for recycling.

Assessment of data quality, representativeness, and potential sources of uncertainty is performed using the Enhanced Pedigree Matrix proposed in the guidance for "Assessing Data Quality of Background Life Cycle Inventory (LCI) Datasets" published by the ACLCA in 2022. No major concerns were found to exist regarding data quality. Minor data gaps in packaging quantities and supplier transportation distances were resolved using estimates from related flows or expert judgement. Secondary data were assessed and deemed to be adequate for temporal, geographical and technological representativeness. Per the PCR, the background process chosen to represent PVC resin was based on the most recent American Chemistry Council report, which comprises PVC production data from plants based in the United States.

Results

Environmental Impact Assessment Results

TRACI 2.1

per 1 m of conduit product.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

| Impact Category | Method | Unit | A1 | A2 | A3 | A1A2A3 | C1 | C2 | C3 | C4 | D |
|-----------------|-----------|--------------|---------|-----------|----------|---------|----|------------|----|----------|-----------|
| GWP-total | TRACI 2.1 | kg CO2 eq | 1.06 | 0.0619 | 0.146 | 1.27 | ND | 0.00745 | ND | 0.0358 | 0.0164 |
| ODP | TRACI 2.1 | kg CFC 11 eq | 1.43e-7 | 9.49e-10 | 8.3e-9 | 1.52e-7 | ND | 1.27e-10 | ND | 1.49e-10 | 7.06e-9 |
| AP | TRACI 2.1 | kg SO2 eq | 0.00303 | 0.000495 | 0.000494 | 0.00402 | ND | 0.0000319 | ND | 0.000112 | 0.0000629 |
| EP | TRACI 2.1 | kg N eq | 0.00127 | 0.0000847 | 0.000258 | 0.00161 | ND | 0.00000718 | ND | 0.00386 | 0.0000398 |
| POCP | TRACI 2.1 | kg O3 eq | 0.0379 | 0.0146 | 0.0049 | 0.0574 | ND | 0.000829 | ND | 0.000944 | 0.000801 |

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particulate Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

The minimum system boundary per the PCR is cradle-to-gate with modules A1-A3, covering supplied raw materials (A1), transport from suppliers to Atkore (A2), and production of manufactured products (A3). Additionally, for conduit products which are not buried or encased in concrete, the end-of-life stage should be declared, encompassing modules C1 (deconstruction), C2 (transport), C3 (waste processing), and C4 (disposal). Module D must also be declared, specifying potential loads and benefits of secondary material, secondary fuel or recovered energy leaving the product system based on scenarios.

The conduit products referenced in this EPD may be used in applications where they are buried or encased in concrete but may also be used for other applications. A cradle-to-gate with end-of-life system boundary was thus adopted for the study. In cases where the user or reader wishes to apply the findings to a buried/encased application, they may leverage the cradle-to-gate results.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"

Atkore



Resource Use Indicators

per 1 m of conduit product.

| Indicator | Unit | A1 | A2 | A3 | A1A2A3 | C1 | C2 | C3 | C4 | D |
|-----------|----------------|---------|----------|---------|---------|----|-----------|----|----------|-----------|
| RPRE | MJ, LHV | 0.271 | 0.0186 | 0.315 | 0.605 | ND | 0.0014 | ND | 0.00224 | 0.0129 |
| RPRM | MJ, LHV | ND | ND | 0.109 | 0.109 | ND | ND | ND | ND | ND |
| RPRT | MJ, LHV | 0.271 | 0.0186 | 0.424 | 0.714 | ND | 0.0014 | ND | 0.00224 | 0.0129 |
| NRPRE | MJ, LHV | 15.5 | 0.849 | 2.63 | 19 | ND | 0.113 | ND | 0.132 | 0.374 |
| NRPRM | MJ, LHV | 8.33 | ND | 0.00506 | 8.34 | ND | ND | ND | ND | 0.145 |
| NRPRT | MJ, LHV | 23.9 | 0.849 | 2.64 | 27.4 | ND | 0.113 | ND | 0.132 | 0.519 |
| SM | kg | 0.00662 | ND | ND | 0.00662 | ND | ND | ND | ND | ND |
| RSF | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| NRSF | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| RE | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ADPF | MJ, LHV | 3 | 0.106 | 0.206 | 3.31 | ND | 0.0149 | ND | 0.0172 | 0.0429 |
| FW | m ³ | 0.0102 | 0.000137 | 0.00218 | 0.0125 | ND | 0.0000157 | ND | 0.000128 | -0.000222 |

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRM or PENRT = Total non-renewable primary resources with energy content, SM: Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

Waste and Output Flow Indicators

per 1 m of conduit product.

| Indicator | Unit | A1 | A2 | A3 | A1A2A3 | C1 | C2 | C3 | C4 | D |
|-----------|---------|----|----|-----------|-----------|----|----|----|-------|----|
| HWD | kg | ND | ND | 0.0000131 | 0.0000131 | ND | ND | ND | ND | ND |
| NHWD | kg | ND | ND | ND | ND | ND | ND | ND | 0.486 | ND |
| HLRW | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| ILLRW | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| CRU | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| MFR | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| MER | kg | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| EE | MJ, LHV | ND | ND | ND | ND | ND | ND | ND | ND | ND |

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"

Atkore



Carbon Emissions and Removals

per 1 m of conduit product.

| Indicator | Unit | A1 | A2 | A3 | A1A2A3 | A5 | C1 | C2 | C3 | C4 | D |
|-----------|--------|----|----|-------|--------|--------|----|----|----|----|---------|
| BCRK | kg CO2 | ND | ND | 0.012 | 0.012 | ND | ND | ND | ND | ND | -0.0024 |
| BCEK | kg CO2 | ND | ND | ND | ND | 0.0096 | ND | ND | ND | ND | ND |

Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

The biogenic removals and emissions are determined following the ACLCA Guidance to Calculating Non-LCIA Inventory Metrics in Accordance with ISO 21930:2017.

Biogenic carbon removals in information module A3 stem from the supply of lumber used to secure conduit in "frames". Assumed recycling rates of this packaging was 20%, taken from the PCR Part A. Emissions in module A5 come from the proportional part of the frames which is landfilled and/or incinerated. The negative removal in module D shows the biogenic carbon leaving the system through recycling. There is a net zero flow of biogenic carbon across all information modules: all biogenic carbon which enters the system in A3 is either emitted in A5 or exits the system in module D.

Impact Scaling Factors

| Trade Size | Outer Diameter (mm) | Inner Diameter (mm) | Minimum Wall Thickness (mm) | Linear Density (kg per m) | Scaling Factor (per m) | Scaling Factor (per 10 ft) |
|--------------------|---------------------|---------------------|-----------------------------|---------------------------|------------------------|----------------------------|
| Schedule 40 1/2" | 2.13E+01 | 1.47E+01 | 2.77E+00 | 2.46E-01 | 5.06E-01 | 1.54E+00 |
| Schedule 40 3/4" | 2.67E+01 | 1.98E+01 | 2.87E+00 | 3.28E-01 | 6.75E-01 | 2.06E+00 |
| Schedule 40 1" | 3.34E+01 | 2.55E+01 | 3.38E+00 | 4.86E-01 | 1.00E+00 | 3.05E+00 |
| Schedule 40 1-1/4" | 4.22E+01 | 3.39E+01 | 3.56E+00 | 6.58E-01 | 1.35E+00 | 4.12E+00 |
| Schedule 40 1-1/2" | 4.83E+01 | 3.97E+01 | 3.68E+00 | 7.87E-01 | 1.62E+00 | 4.94E+00 |
| Schedule 80 1/2" | 2.13E+01 | 1.28E+01 | 3.73E+00 | 3.06E-01 | 6.29E-01 | 1.92E+00 |
| Schedule 80 3/4" | 2.67E+01 | 1.77E+01 | 3.91E+00 | 4.15E-01 | 8.53E-01 | 2.60E+00 |
| Schedule 80 1" | 3.34E+01 | 2.31E+01 | 4.55E+00 | 6.11E-01 | 1.26E+00 | 3.83E+00 |
| Schedule 80 1-1/4" | 4.22E+01 | 3.12E+01 | 4.85E+00 | 8.43E-01 | 1.73E+00 | 5.28E+00 |
| Schedule 80 1-1/2" | 4.83E+01 | 3.67E+01 | 5.08E+00 | 1.08E+00 | 2.23E+00 | 6.79E+00 |

The results in this EPD are reported for 1 m (the declared unit) of 1" Schedule 40 solid wall rigid PVC conduit (the reference product). Environmental impacts of other types and trade sizes (product-specific results) can be calculated using the equation $Results_{PS} = Results_{Ref} \times Multiplier_{PS}$ where $Results_{PS}$ is the product-specific result per declared unit, $Results_{Ref}$ is the result per declared unit of the reference product and $Multiplier_{PS}$ is the product-specific declared unit multiplier.

The impact scaling factor table provides the product-specific declared unit multipliers, $Multiplier_{PS}$ (marked as "Scaling Factor" in the table), which are calculated as (specific product's mass per declared unit)/(reference product's mass per declared unit), that is, the quotient between the linear density of a specific type and trade size and that of 1" Schedule 40 solid wall rigid PVC conduit. Scaling factors are also provided for calculating impacts per 10-foot section of conduit.

This calculation method can be used to derive a result for any or all declared indicators and for any reported life module(s). When using this equation, the EPD user defines which indicator and life cycle stage(s) they are using to calculate a product-specific result. The $Results_{PS}$ and $Results_{Ref}$ values must align with the same indicator and life cycle stage(s) included.

Scenarios

End of Life

C1 - C4 Modules

Collection Process

Collected with Mixed Construction Waste: 0.486 kg

Recovery

Landfill: 0.486 kg

Disposal

Product or Material for Final Disposal: 0.486 kg

Removals of Biogenic Carbon: 0.012 kg CO₂

Assumptions for scenario development:

C1, deconstruction/demolition includes dismantling or demolition, of the construction product from the construction works and the energy use for this, including initial on-site sorting of the materials. For conduit, removal at the end of life requires only human labor and does not contribute to lifetime environmental impacts.

C2, transportation to waste processing or disposal, includes the transportation of the discarded construction product as part of the waste processing, for example to a recycling site and transportation of waste, for example to final disposal. Per the PCR, transport was assumed to be 100 kilometers by truck.

C3, waste processing, which includes, for example collection of waste fractions from the deconstruction, recovery and waste processing of material flows resulting in materials for reuse, secondary materials, secondary fuels or export of recovered energy. As conduit is not recycled, the C3 modules is included but has zero impacts.

C4, disposal of waste which includes physical pre-treatment and management of the disposal site, including provision and transport of all materials, products and related energy and water use. Per the PCR, conduit was assumed to be landfilled at End of Life.

Reuse, Recovery and / or Recycling Potentials & Relevant Scenario Information

D Module

Recycled Content of Product: 1.36 %

Further assumptions for scenario development:

Module D information declares potential loads and benefits of secondary material, secondary fuel or recovered energy leaving the product system based on scenarios. The impacts associated with module D are calculated by identifying the point of substituted functional equivalence where the secondary material substitutes primary production and subtracting the impacts resulting from the substituted production of the product.

For PVC conduit, recycled PVC used in the product is accounted for in module D. Since more recycled PVC is used as an input than is produced at the manufacturing sites, there is a net flow of recycled material into the system. This net input flow is treated as a negative net output flow.

There are no other flows of recovered materials out from the PVC conduit product system. Although PVC is recyclable, the PCR specifies a product recycling rate of 0% for "other materials", under which PVC is classified.

In addition, biogenic carbon removals associated with packaging materials leaving the system boundary through recycling during A5 are declared in module D.

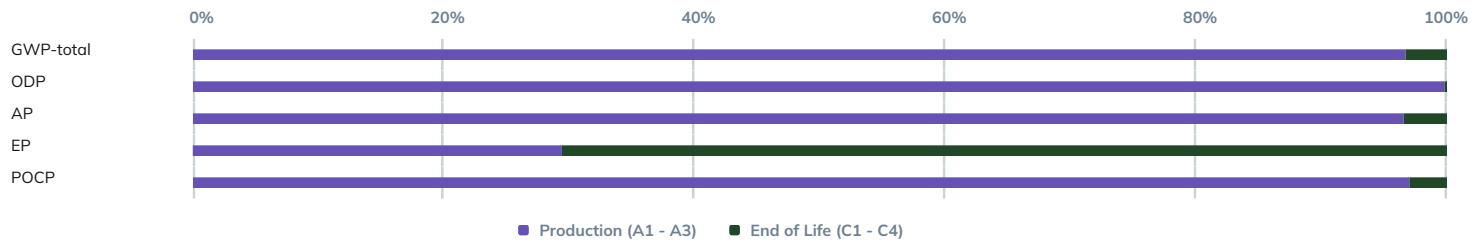
Interpretation

Solid Wall PVC Conduit of Trade Sizes Smaller Than or Equal to 1 1/2"

Atkore



The contribution analysis indicates that the majority of the potential impacts occur as a result of raw material supply (A1) with an important contribution coming also from supplier transport (A2) and manufacturing (A3). PVC resin is the main material contributing to impacts in A1. The exception is for the impact category "Eutrophication Potential", where direct emissions from landfilling the conduit at end of life (C4) is the major driver.



Additional Environmental Information

Atkore PVC conduit does not contain any substances identified as hazardous according to the normative requirements in standards or regulations applicable in the markets where they are sold, and the additional standards listed in PCR Part A 8.4.1.

Atkore PVC conduit does not release any dangerous substances as classified by the standards listed in PCR Part A 8.4.1.

Further Information

Secondary data contributing >30% to disclosed environmental impact categories.

| Component or Input | Dataset Used | Database |
|--------------------|---|------------------|
| PVC Resin | Custom dataset modeled after the 2021 report, prepared by Franklin Associates, entitled Cradle-to-Gate Life Cycle Analysis of Polyvinyl (PVC) Resin | Custom |
| Electricity | Various state-specific grid mixes from DATAS-MART LCI Package | DATAS-MART v2021 |
| Landfilling of PVC | Waste polyvinylchloride {RoW} treatment of waste polyvinylchloride, sanitary landfill Cut-off, U | ecoinvent 3.9.1 |
| Truck Transport | Transport, freight, lorry, unspecified {RoW} market for transport, freight, lorry, unspecified Cut-off, U | ecoinvent 3.9.1 |

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Allied Tube & Conduit ▲ AFC Cable Systems ▲ Heritage Plastics ▲ Unistrut
Unistrut Construction ▲ Cope ▲ US Tray ▲ Calbrite ▲ Calbond ▲ Kaf-Tech
Columbia-MBF ▲ Eastern Wire + Conduit ▲ ACS/Uni-Fab ▲ Cii
Power-Strut ▲ Calconduit ▲ Razor Ribbon ▲ Calpipe Security
FRE Composites ▲ Vergokan ▲ Flexicon ▲ Marco

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