

Southern Pipe, Inc.

Sa-Lite[®]

Rigid Nonmetallic Cellular Core Schedule 40 PVC Conduit

UL[®] Listed • RUS Listed

135 Random Drive, New London, NC 28127 • P.O. Box 606, New London, NC 28127-0606
Phone: 704-463-5202 • Fax: 704-463-5203 • www.southern-pipe.com



Manufacturers of Quality PVC Electrical Conduit

Southern Pipe, Inc. rigid nonmetallic cellular core Schedule 40 conduit (*So-Lite*[™]) is manufactured to meet or exceed ANSI/UL 651, 90° C, NEMA TC-2, and ASTM F-891. So-Lite conduit is available UL Listed and RUS Listed in sizes 3", 4", 5" and 6" and non-UL Listed 8". So-Lite conduit is acceptable as nonmetallic raceway for conductors and cable in accordance with Article 352 of ANSI/NFPA 70, "National Electric Code". So-Lite conduit is suitable for aboveground use indoors or outdoors exposed to sunlight and weather where not subject to physical damage, and for underground use by direct burial or encasement in concrete.

Each piece bears the UL listing number (39GX), is marked RUS Listed, and has permanent markings to identify manufacturer, date and shift manufactured.

Samples are tested by in-house quality control along with representatives of Underwriters Laboratories to assure compliance to these specifications.

The PVC material used to manufacture Southern Pipe, Inc. conduit meets or exceeds compound cell classification 12254B as defined by ASTM D 1784 Standard Specification, Rigid Polyvinyl Chloride Compounds for Cell Classification 12454B (Formerly Type 1, Grade 1 and also designated PVC 1120).

All products manufactured by Southern Pipe, Inc. are produced in New London, North Carolina.



Standard Schedule 40 Conduit vs *So-Lite*® Schedule 40 Conduit

Standard Schedule 40 Conduit				<i>So-Lite</i> ® Schedule 40 Conduit		
Min Wall	O.D.	Weight Per 100'		Min Wall	O.D.	Weight Per 100'
0.216	3.500	156	3"	0.216	3.500	116
0.237	4.500	223	4"	0.237	4.500	163
0.258	5.563	310	5"	0.258	5.563	221
0.280	6.625	395	6"	0.280	6.625	286
0.322	8.625	547	8"*	0.322	8.625	440

Standard Schedule 40 Conduit

So-Lite® Schedule 40 Conduit

✓	UL Listed for use in Above Ground & Underground Applications	✓
✓	RUS Listed	✓
✓	Passes all UL 651 testing	✓
✓	Tensile Strength	✓
✓	Deflection under Heat & Load	✓
✓	Low Temperature Handling	✓
✓	Water Absorption	✓
✓	Resistance to Crushing	✓
✓	Resistance to Impact	✓
✓	Flame	✓
✓	Conduit for use with 90° C wire	✓
✓	Resistance to Specific Reagents	✓
✓	Sunlight Resistance	✓
✓	Pipe Stiffness	✓
✓	Joint Separation	✓
✓	Joint Water Tightness	✓
✓	Elastomeric Materials Accelerated Aging	✓
✓	Permanency of Printing	✓
✓	Meets NEMA TC-2	✓
✓	Uses Standard Schedule 40 Fittings	✓
✓	Long End Bells	✓
	Reduced Weight	✓

*8" is not a UL Listed Product



Southern Pipe, Inc.

Manufacturers of Quality PVC Electrical Conduit

Southern Pipe, Inc.'s rigid non-metallic cellular core schedule 40 conduit (*Sa-Lite™*), is UL 651 listed. In order to obtain UL listing *So-Lite™* must pass all quality and performance specification defined by UL 651, including but not limited to: tensile strength, deflection under heat and load, low temperature handling, resistance to crush and impact. *Sa-Lite™* is rated 90° C.

Sa-Lite™ has been approved and used in a variety of projects, utilities, and DOTs, including but not limited to:

Utility / Power

- Comcast
- Duke/Progress Energy
- FP&L (Florida Power & Light)
- GRU (Gainesville Regional Utilities)
- Hancock Wind Farm – Aurora, ME
- JEA (Jacksonville Electric Authority)
- Jericho Wind Turbines – Berlin, NH
- Kingdom Community Wind Farm – Lowell, VT
- TECO (Tampa Electric)

Industrial

- ALDI Distribution – Petersburg, VA
- Alliance Sheets – Bristol, IN
- Amazon Distribution Centers – Various
- Ben & Jerry's – St Albans, VT
- Conagra Foods – Frankfort, IN
- Kronospan – Eastaboga, AL
- Lonza Biologics – Portsmouth, NH
- Somic USA – Wytheville, VA
- Sysco Food Distribution Center – Plympton, MA
- Volvo Auto Plant – Ridgeville, SC

Airports / Transportation

- Birmingham-Shuttlesworth International - (BHM)
- Bradley International Airport– (CAA)
- Burlington International Airport – (BTV)
- Charlotte Douglas International (CLT)
- Cleveland Hopkins International (CLE)
- Orlando International Airport (MCO)
- Fort Wayne International Airport (FWA)
- Jacksonville Port Authority – Jacksonville, FL
- John F. Kennedy International Airport (JFK)
- Lawrence Municipal Airport – (LWM)
- Logan International Airport – (BOS)
- Northeast Kingdom International Airport – (EFK)
- Quonset State Airport – (OQU)
- United Airline Reservation Center – Sterling, VA
- Washington Metro - Twinbrook Station – Rockville, MD
- Washington Dulles International Airport (IAD)

Military / Government

- Camp Dawson Army National Guard – Kingwood, WV
- Camp Lejeune - NC
- Camp Mackall – Hoffman, NC
- Federal Correctional Institute – Danbury, CT
- Fort Bragg – NC
- Fort Campbell – KY
- Fort Pickett - VA
- Kentucky State Reformatory – La Grange, KY
- King's Bay Naval Base – King's Bay, GA
- Multiple US Embassies – Various Countries
- Red River Arsenal – Texarkana, TX
- Shaw Air Force Base – Shaw AFB, SC
- TN Air National Guard – Smyrna, TN
- Warner Robins Air Force Base – Warner Robins GA

Hospitals

- Eastern Maine Medical Center – Bangor, ME
- King's Daughter Hospital – Madison, IN
- MGMC New Regional Hospital – Augusta, ME
- VA Medical Centers – Orlando FL, West Haven, CT

Data Centers

- Apple Data Center – Maiden, NC
- CloudHQ Data Center – Manassas, VA
- Digital Realty Data Center – Ashburn, VA
- ESPN Digital Center – Bristol, CT
- Facebook Data Centers – Various

Municipal

- Back River WWTP – Baltimore, MD
- Miami Dade Water – Key Biscayne, FL
- Pierce Island Wastewater – Portsmouth, NH
- Quarles Wastewater Treatment Plant – Marietta, GA
- Snapfinger Wastewater – Ellenwood, GA
- Southeast Water Treatment – Grant, AL
- South Wastewater Treatment Plant – Baton Rouge, LA

DOT /Highway

- Front Beach Rd Improvements – Panama City, FL
- HWY 17 UG E/C/T Conversion – North Myrtle Beach, SC
- MASS Port, Boston MA
- NCDOT (NC Department of Transportation)
- ODOT (Ohio Department of Transportation) Meets Construction and Material Specification 725.051
- US Hwy 321 Improvements – Blowing Rock, NC
- VDOT (Virginia Department of Transportation)
- Virginia I-95 Hot Lanes – Washington, DC – Richmond, VA
- Whittier Bridge / I-95 Improvement Project – Salisbury, MA

Schools / Universities

- Alabaster High School – Alabaster, AL
- Chattooga County High School – Summerville, GA
- Clemson University – Clemson, SC
- Indiana University Health – Bloomington, IN
- Liberty University – Lynchburg, VA
- Pace University – Pleasantville, NY
- The Morgan School – Clinton, CT
- University of Massachusetts – Boston, MA
- University of South Carolina - Columbia, SC
- University of Tennessee/Oak Ridge National Laboratory Cherokee Farm Campus – Knoxville, TN
- Utica College – Utica, NY
- Sanford High School – Sanford, MA
- Westfield State University – Westfield MA

Miscellaneous

- Assembly Square Mall – Somerville, MA
- Citrus Bowl – Orlando, FL
- Bridgepoint Apartments at Patriots Point – Mt. Pleasant, SC
- Gillette Stadium – Foxboro, MA
- Lowes – Various
- Marriott - Various
- Millcreek Development – Concord, MA
- Patriots Point – Mt Pleasant, SC
- PNC Arts Center – Holmdel, NJ
- NH Motor Speedway – Loudon, NH
- Schoodic Woods – Winter Harbor, ME
- Top Golf - Various
- Walmart / Sam's Club – Various
- Wynn Casino – Everett, MA



Southern Pipe, Inc.

P. O. Box 606, 135 Random Drive, New London, NC 28127

Phone: 704-463-5202 Fax: 704-463-5203 www.southern-pipe.com

“So-Lite”

“CELLULAR CORE” SCHEDULE 40 CONDUIT

With “Powerline”™

SIZE	PART NUMBER	DESCRIPTION	MIN WALL	O.D.	WEIGHT PER 100'	PALLET QTY
3"	21430 25430	10 FT BE 20 FT BE	.216	3.500	116	880 1760
4"	21440 25440	10 FT BE 20 FT BE	.237	4.500	163	570 1140
5"	21450 25450	10 FT BE 20 FT BE	.258	5.563	221	380 760
6"	21460 25460	10 FT BE 20 FT BE	.280	6.625	286	260 520
* 8"	21480 25480	10 FT BE 20 FT BE	.322	8.625	440	140 280

For easy identification, all *Southern Pipe, Inc.* Cellular Core Conduit is marked with a blue “Powerline”™ from spigot to bell end.



Southern Pipe, Inc. “Cellular Core” Schedule 40 Conduit is

UL Listed, RUS Listed, Rated 90° C and produced to the following standards:

* 8” Sch 40 is a non UL LISTED product

Physical Dimensions

Underwriters Laboratory, Inc.® (UL)

National Electrical Manufacturers Association (NEMA)

National Electrical Manufacturers Association (NEMA)

UL 651

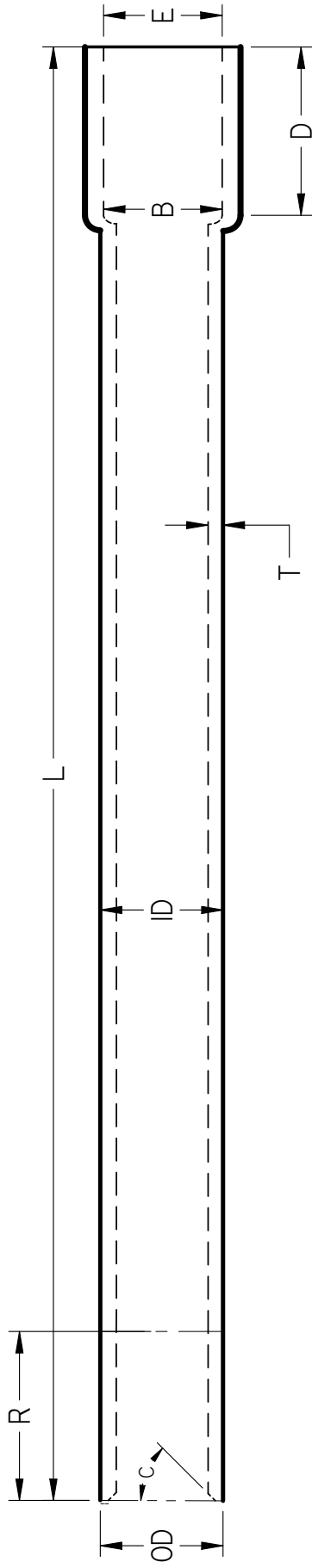
TC-2

TC-18

Physical Testing


American Society for Testing and Materials (ASTM)

ASTM F-891

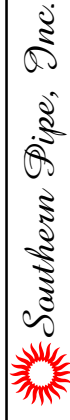


Southern Pipe Part Number	Trade Size	T Min Wall Thickness	OD Outside Diameter	ID Inside Diameter	E Bell Entrance ID	B Bell Bottom ID	D Min Bell Depth	C Chamfer Angle	R Reference Mark	L Total Length
21430	3"	0.216	3.500	3.008	3.515	3.492	3.625	45°	3.625	120
21440	4"	0.237	4.500	3.961	4.515	4.491	4.125	45°	4.125	120
21450	5"	0.258	5.563	4.975	5.593	5.553	1.750	45°	4.750	120
21460	6"	0.280	6.625	5.986	6.658	6.614	5.750	45°	5.750	120
21480*	8"	0.322	8.625	7.853	8.670	8.610	6.750	45°	6.750	120
25430	3"	0.216	3.500	3.008	3.515	3.492	3.625	45°	3.625	240
25440	4"	0.237	4.500	3.961	4.515	4.491	4.125	45°	4.125	240
25450	5"	0.258	5.563	4.975	5.593	5.553	1.750	45°	4.750	240
25460	6"	0.280	6.625	5.986	6.658	6.614	5.750	45°	5.750	240
25480*	8"	0.322	8.625	7.853	8.670	8.610	6.750	45°	6.750	240

*8" is Non UL-Listed

 Listed 651
 NEMA TC 2
 Sunlight Resistant
 See NEC Article 352 for Usage

RUS Listed
 NEMA TC 18
 90° C Wire



Schedule 40 Cellular Core Rigid Non-Metallic PVC Conduit

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
ALL Dimensions are Nominal

NAME		DATE
DRAWN	K. Mitchell	04/01/13
CHECKED		
ENG. APPR		

FILE: SCH 40 So-Lite for Brochure.dwg 10

FOR EASY IDENTIFICATION, ALL CELLULAR CORE CONDUIT IS MARKED WITH A BLUE *Powerline*® from spigot to bell

Section 1 GENERAL

1.1 SCOPE

NEMA TC 2-2013 covers the following types of Electrical Polyvinyl Chloride (PVC) Conduit (EPC), which may be constructed of single, solid layer of PVC, or **may be constructed of multiple layers of PVC, one of which may be cellular (foamed) PVC.** The designations "40" and "80" refer to Schedules 40 and 80 (EPC-40 and EPC-80), respectively, of Iron Pipe Size (IPS) dimensions. Common uses for these designations are:

- a) EPC-40—Electrical conduit designed for normal-duty applications aboveground; concrete-encased applications or direct burial. May be referred to as "heavy wall."
- b) EPC-80—Electrical conduit designed for heavy-duty (areas of physical damage) applications aboveground; concrete-encased applications or direct burial. May be referred to as "extra heavy wall."

Note: The values stated in U.S. customary units are to be regarded as the standard.

NEMA TC2-2013 does not fully address elbows and fittings. See NEMA TC3-2013.

1.2 REFERENCED STANDARDS

In this publication, reference is made to the standards listed below. Copies are available from the indicated sources. Latest edition of these standards should be used unless otherwise specified.

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428

D 1600	<i>Standard Terminology for Abbreviated Terms Relating to Plastics</i>
D 2122	<i>Standard Test Method of Determining Dimensions of Thermoplastic Pipe and Fittings</i>
D 2564	<i>Standard Specification for Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Piping Systems</i>
D 618	<i>Standard Practice for Conditioning Plastics for Testing</i>
D 883	<i>Standard Terminology Relating to Plastics</i>
F 402	<i>Standard Practice for Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings</i>
F 412	<i>Standard Terminology Relating to Plastic Piping Systems</i>
F 656	<i>Standard Specification for Primers for Use in Solvent Cement Joints of Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings</i>



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Rigid Nonmetallic Cellular Core Schedule 40 PVC Conduit

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Rigid Nonmetallic Cellular Core Schedule 40 PVC Conduit

[See General Information for Rigid Nonmetallic Cellular Core Schedule 40 PVC Conduit](#)

SOUTHERN PIPE INC

E316075

135 RANDOM DR
PO BOX 606
NEW LONDON, NC 28127 USA

Rigid nonmetallic cellular core conduit (Schedule 40).

[Last Updated](#) on 2008-12-12

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[Conduit and Fittings] Rigid Nonmetallic Cellular Core Schedule 40 PVC Conduit

[See General Information for Conduit and Fittings](#)

USE AND INSTALLATION

This category covers rigid nonmetallic cellular core PVC conduit (Schedule 40), including straight conduit in trade sizes 1/2 to 6 (metric designators 16 to 155) inclusive, intended for installation as rigid nonmetallic raceway for conductors and cable in accordance with [Article 352 of ANSI/NFPA 70, "National Electrical Code."](#) This conduit is intended for installation and use and in accordance with the following information.

Rigid nonmetallic cellular core PVC Schedule 40 conduit is suitable for aboveground use indoors or outdoors exposed to sunlight and weather where not subject to physical damage, and for underground use by direct burial or encasement in concrete.

Unless marked for higher temperatures, rigid nonmetallic cellular core PVC conduit is intended for use with conductors and cable rated 75°C or less, including where it is encased in concrete within buildings and where ambient temperature is 50°C or less. Where encased in concrete in trenches outside of buildings, [it is suitable for use with conductors and cable rated 90°C or less.](#)

Listed rigid nonmetallic cellular core PVC conduit is inherently resistant to atmosphere containing common industrial corrosive agents and will also withstand vapors or mist of caustic, pickling acids, plating bath and hydrofluoric and chromic acids.

Rigid nonmetallic cellular core PVC conduit (including couplings) that has been investigated for direct exposure to other reagents may be identified by the designation "Reagent Resistant" printed on the surface of the product. Such special uses are described as follows: Where exposed to the following reagents at 60°C or less: Acetic, Nitric (25°C only) acids in concentrations not exceeding 1/2 normal; hydrochloric acid in concentrations not exceeding 30%; sulfuric acid in concentrations not exceeding 10 normal; sulfuric acid in concentrations not exceeding 80% (25°C only); concentrated or dilute ammonium hydroxide; sodium hydroxide solutions in concentrations not exceeding 50%; saturated or dilute sodium chloride solution; cottonseed oil, or ASTM 3 petroleum oil.

Rigid nonmetallic cellular core PVC conduit is designed for connection to couplings, fittings and boxes by the use of a suitable solvent-type cement. Instructions supplied by the solvent-type cement manufacturer describe the method of assembly and precautions to be followed.

RELATED PRODUCTS

For additional Listings of rigid nonmetallic conduit suitable for underground use, see Reinforced Thermosetting Resin Conduit ([DZKI](#)), Rigid Nonmetallic Schedule 40 and Schedule 80 PVC Conduit ([DZYR](#)) and Rigid Nonmetallic Underground Conduit, Plastic ([EAZX](#)).

Fittings for rigid nonmetallic cellular core conduit are covered under Conduit Fittings ([DWTI](#)).

ADDITIONAL INFORMATION

For additional information, see Electrical Equipment for Use in Ordinary Locations ([AALZ](#)).

REQUIREMENTS

[The basic standard used to investigate products in this category is ANSI/UL 651, "Schedule 40 and 80 Rigid PVC Conduit."](#)

UL MARK

The Listing Mark of Underwriters Laboratories Inc. on the product is the only method provided by UL to identify products manufactured under its Listing and Follow-Up Service. The Listing Mark for these products includes the UL symbol (as illustrated in the Introduction of this Directory) together with the word "LISTED," a control number, and the product name "Rigid Nonmetallic Cellular Core Conduit Aboveground and Underground (Schedule 40)."

* * * * *

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Last Updated on 2008-06-30

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United States Department of Agriculture
Rural Development

December 2, 2009

Bryan C. Mitchell
President and CEO
Southern Pipe, Inc
135 Random Drive
New London, NC 28127

Dear Mr. Mitchell:

Technical Standards Committee "A"-Telecommunications has accepted Southern Pipe's "So-Lite" schedule 40 cellular core conduit. This product will be included in our next update of the List of Acceptable Materials.

2.2.1
07-30-2009
hc

Underground Conduit		
<p>Note: For fiber and plastic conduit, Type I, Type B or Type EB is for concrete encasement and Type II, Type C or Type DB may be directly buried. Schedule 40 is a high strength conduit that may be used for concrete encasement or direct burial. Type D is for exposed installation, as on bridges.</p>		
Manufacturer	Type Conduit	Catalog Number
Southern Pipe, Inc.	Plastic	PVC Types EB, DB, and Sch. 40, So Lite (Sch. 40 cellular core)

Agency Listed manufacturers are responsible for an annual compliance with the Agency "Buy American" requirement. Listed manufacturers must notify the Agency by the end of January each year certifying compliance with the Agency "Buy American" requirement to maintain product listings.

Please note that manufacturers certifying domestic origin for a product, as sold to RUS Telecommunications borrowers, comply with the Agency "Buy American" requirement as a domestic product. However, there may be particular cases where a product configuration (or for miscellaneous adjunct materials) that may cause the product to become non-domestic. When this is the case, the manufacturer shall inform the borrower that for this particular sale the product is itemized to identify all non-domestic materials.

Manufacturers are responsible to inform product distributors or re-sellers of the particular circumstances that would make their product non-domestic or to have an internal procedure in place as to ensure that the borrower is informed when the product has become non-domestic.

1400 Independence Ave, S.W. · Washington DC 20250-0700
Web: <http://www.rurdev.usda.gov>

Committed to the future of rural communities.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights,
1400 Independence Avenue, S.W., Washington, DC 20250-9410 or call (800) 795-3272 (Voice) or (202) 720-6382 (TDD).