

SCEPTER PVC FLOOR BOXES DATA SHEET

RIGID PVC CONDUIT & FITTINGS



Scepter[®]
Rigid PVC Conduit & Fittings



ELECTRICAL SYSTEMS

RIGID PVC CONDUIT & FITTINGS

- 12mm – 200mm
- 1/2" – 8"


IPEX
by *alixis*

We build tough products for tough environments[®]

SCEPTER Conduit & Fittings preferred for the LONG RUN

This manual provides the most comprehensive information about Scepter® PVC systems – from basic raw material to installation characteristics of the finished product. Written with the engineer, contractor and distributor in mind, it is based on laboratory test results and IPEX Electrical Inc.'s many years of field experience.

At IPEX, we have been extruding Scepter PVC conduit and molding Scepter PVC fittings since 1951. We formulate our own compounds, maintain strict quality control during production, and offer the most comprehensive line of electrical products throughout North America.

More important, our commitment to our customer extends beyond the sale. Quality control and thorough jobsite field reports have earned Scepter a reputation for product quality and service excellence.

Engineers, electricians, contractors, specifiers and utilities have realized for many years the advantages of PVC. Whether exposed, concealed in walls, encased in concrete, or directly buried, IPEX electrical products are preferred For The Long Run.



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APPLICATIONS

- n UTILITIES
- n COMMUNICATIONS
- n AIRPORTS
- n CABLE
- n SUBWAYS
- n CAR WASHES
- n PARKING GARAGES
- n FISH PLANTS
- n STEEL MILLS
- n MARINAS
- n BRIDGES AND TUNNELS
- n MINES
- n STREET AND HIGHWAY LIGHTING
- n RESIDENTIAL APPLICATIONS
- n WATER TREATMENT PLANTS
- n SEWAGE TREATMENT PLANTS
- n PULP AND PAPER INDUSTRIES
- n AGRICULTURAL, DAIRY, HOGS, CATTLE, CHICKEN, ETC.
- n FOOD PROCESSING PLANTS

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ADVANTAGES

LABOUR SAVINGS

Compared to metal, PVC products reduce labor on a typical installation by up to two-thirds. The reason? PVC is easy to work with. It can also be cut and joined without the usual pipe vices, cutters, threading equipment, and reamers associated with metal conduit.

SUNLIGHT RESISTANT

The 2006 Canadian electrical code rule 2-130 is intended to ensure that totally enclosed nonmetallic raceways are properly protected against adverse effects from direct exposure to UV rays. electrical nonmetallic raceways marked for such application are suitable for installation and use for direct exposure to rays of the sun. Scepter Rigid PVC conduit meets the criteria for sunlight resistance, is approved for the purpose, and is appropriately marked.

LIGHTWEIGHT CONDUIT

Scepter Rigid PVC Conduit is one-half the weight of aluminum and one-sixth the weight of steel. As a result, handling and installation are easier and faster, reducing labor costs.

EASY JOINING

Solvent cementing is all that is required, eliminating the need for power-threading machines, pipe vices and cutting equipment. A hacksaw or carpenter's saw is the only equipment required.

STRENGTH

Scepter Rigid PVC Conduit offers both high impact and high tensile strength, even in cold temperatures. Scepter Rigid PVC Conduit and fittings meet and exceed all CSA and UL standards.

SCEPTER RIGID PVC CONDUIT SCHEDULE 40

Size		CSA Impact Test		UL Impact Test	
in	mm	@ -29°F	@ -34°C	@ 72°F	@ 23°C
1/2	12	8.9 ft.lbs	12 joules	50 ft.lbs	68 joules
3/4	20	8.9 ft.lbs	12 joules	80 ft.lbs	109 joules
1	25	8.9 ft.lbs	12 joules	100 ft.lbs	136 joules
1-1/4	32	8.9 ft.lbs	12 joules	120 ft.lbs	163 joules
1-1/2	40	8.9 ft.lbs	12 joules	150 ft.lbs	204 joules
2	50	8.9 ft.lbs	12 joules	190 ft.lbs	258 joules
2-1/2	65	8.9 ft.lbs	12 joules	210 ft.lbs	285 joules
3 - 6	75-150	8.9 ft.lbs	12 joules	220 ft.lbs	298 joules
8	75-150	8.9 ft.lbs	12 joules	n/a	n/a

Note:
CSA impacts are carried out at temperatures that are well below freezing, while UL impacts are tested at room temperature.

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EASY WIRE PULLS

PVC's exceptionally smooth interior surface greatly reduces the amount of friction while pulling conductors/wires through long runs, even with 90° bends. A large pull-rope and wire-pulling lubricant should be used when pulling all conductors and wires.

NONCORRODING

PVC is immune to damage from naturally corrosive soil conditions, as well as electro-chemical and galvanic corrosion. This ensures lower maintenance costs and superior performance For The Long Run.

NONCONDUCTING

Scepter Rigid PVC Conduit pipe and fittings are nonsparking and nonconducting, thereby eliminating the most dangerous 'second point of contact' and 'phase to ground' faults. The use of a separate grounding conductor in a Scepter PVC conduit system gives a complete and positive ground for the whole system.

CHEMICAL RESISTANCE

One of the greatest benefits of PVC is its excellent chemical resistance. It resists attack by acids, alkalis, salt solutions, and many other types of chemicals. For more information on PVC and chemical resistance, refer to the IPEX Chemical Resistance Guide.

LONG LIFE

Scepter Rigid PVC Conduit pipe and fittings retain their original properties after years of exposure to heat and weather. In addition, resistance to fungi, bacterial action, rodents, termites and corrosive agents ensures a long, trouble-free life for PVC conduit installed indoors or outdoors.

FIRE RESISTANT

IPEX's proprietary PVC compound used to manufacture Scepter products is a self-extinguishing material and will not support combustion. Samples taken from an actual fire show the outer surface of the conduit was blistered and charred. The interior of

IPEX Compound	Flame Spread	Smoke Developed	Fuel Contribution
1/8" thickness	10 - 20	225 - 270	0
3/4" thickness	10 - 20	300 - 390	0

the conduit, however, was unaffected. Additionally, the undamaged conductors were then removed and reinstalled in new conduit. Fire-resistant characteristics when tested to CAN ULC S102.2.

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FT-4 RATING

Scepter Rigid PVC conduit is certified to meet the requirements of FT-4 allowing its use in noncombustible construction per Section 3.1.5.20 of the National Building Code, which reads:

1.) Subject to the limits on the size of elements that penetrate fire separations as stated in Sentence 3.1.9.3.(2), within a fire compartment of a building required to be of noncombustible construction, totally enclosed nonmetallic raceways not more than 175mm in outside diameter, or of an equivalent rectangular area, are permitted to be used to enclose optical fibre cables and electrical wires and cables, provided the raceways exhibit a vertical char not more than 1.5m when tested in conformance with the Vertical Flame Test (FT - 4) Conduit or Tubing on Cable Tray in Clause 6.16 of CSA C22.2 No. 211.0, "General Requirements and Methods of Testing for Nonmetallic conduit."

CONCRETE TIGHT

Scepter Rigid PVC Conduit pipe and fittings are designed and engineered to be concrete tight in all weather conditions.

SUITABLE FOR DIRECT BURIAL

PVC is suitable for direct burial and requires no extra protection when installed in accordance with the Canadian Electrical Code, the National Electrical Code, and the local inspection authority guidelines. The usual care regarding trenches and backfilling should be respected.

ONE-SOURCE SPECIFICATION

IPEX offers a full range of PVC fittings and accessories. As a result, it is easy to specify a single source PVC system.

QUALITY CONTROL

In addition to IPEX's rigorous quality control testing, Scepter electrical products carry third-party certification by CSA, UL, and NRTL.

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FBDRC

Floor Box Duplex Receptacle Cover (Nonmetallic)
(includes flush mount cover, blank cover & gasket)

Brown	FBDRCB	076943
Gold	FBDRCG	076942
Grey	FBDRCGr	076941
Light Almond	FBDRCA	076940