### **MATERIAL SAFETY DATA SHEETS**

# SAFER NO WORKERS BELOW PREVENTS INJURIES OR DEATHS

### **BETTER**

RATED AT 4,000 PSI TENSILE STRENGTH AT BREAK

# OVER 12X FASTER THAN SPACERS & CHAIRS



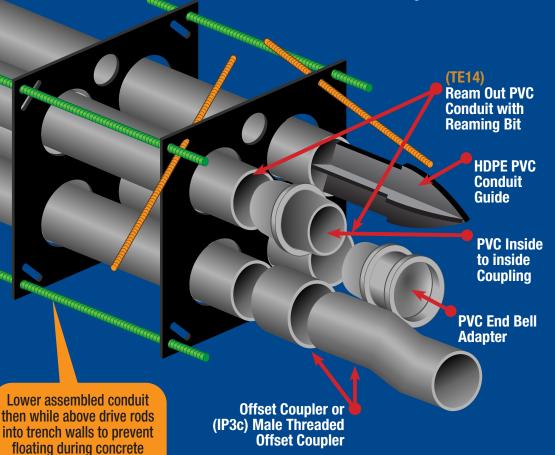
# HDPE CUSTOM TEMPLATES

**Patent Pending** 



Eliminates dangerous & expensive time working in trench strengthening weak spacers & chairs with tie wire or other methods.

Lowering assembled conduit from above allows other savings – Digging a narrower trench for less excavation, concrete or slurry, shoring and backfill. The savings are huge!





### **ALSO SUITABLE FOR TRANSFORMER & SWITCHGEAR STUB UPS**

Submittals provided with all duct bank quotes



or slurry pour.







PATENT PENDING PATENTED



LABELS APPLY TO PRODUCTS ONLY WHERE SHOWN ABOVE

# **QwikDuct HDPE Bore Spacers**





3/4" HDPE for Greater Strength to Accommodate Assemblies with Wheels.

2" Diameter Wheels are Standard, Larger Size Diameters Available Upon Request

Roll assembled conduit into caissons under obstructions.

#### WHEN ORDERING CUSTOMER MUST SPECIFY:

- 1. Material Thickness 3/8", 1/2", 3/4" and Load Rating Required (1/2" & 3/4" are special order materials)
- 2. Size & Location of Rebar Holes
- 3. Spacing Between Conduit Openings
- 4. Rebar Stake Down Slots Required?
- 5. Diameter of Conduits
- **6. Footage Between Templates**
- 7. Size & Location of Concrete Flow Holes
- 8. Size. Number & Location of Wheels

Customer must specify larger diameter holes to enable feeding bell ends of conduit from either direction.









PATENT PENDING PATENTED



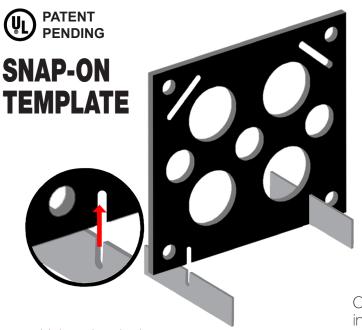
LABELS APPLY TO PRODUCTS ONLY WHERE SHOWN ABOVE

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### **QwikDuct HDPE**

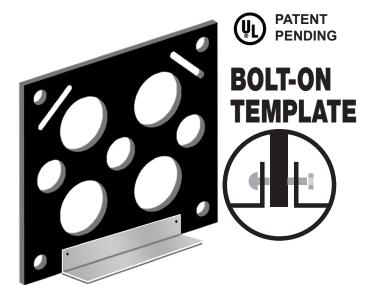


### **CUSTOM QWIKDUCT TEMPLATE FEET**



Unique interlock system serves as a base & keeps templates upright

Quickly apply glue if needed to keep feet in place when lowering



Customer must specify all details. Sold separately or installed by SP. Attach any length 2" tall x up thru 4" wide base, 16 gauge galvanized steel to bottom of templates.

Customer must allow air space to allow concrete flow under templates and feet.

Attach both angle irons with 2 bolts and nuts for each template during assembly on job site before lowering into trench

# QWIKDUCT TEMPLATE HOLE SIZING GUIDE

Customer must make certain conduit openings are wide enough to allow the bell end of conduit to be fed thru from either direction if required by specs.

SCHEDULE 40 PVC CONDUIT SIZE (Inches)												
1/2	3/4	1	11/4	11/2	2	21/2	3	31/2	4	5	6	8
SUGGESTED DIAMETER OF CONDUIT HOLE (Inches)												
For Bell End Clearance												
11/4	11/2	2	21/4	21/2	3	31/2	41/4	5	51/4	61/4	71/2	93/4

NOTE: A MINIMUM OF  $1\frac{1}{2}$  OF MATERIAL INCH MUST BE MAINTAINED BETWEEN CONDUIT AND ALL OPENINGS TO COMPLY WITH UL REQUIREMENTS.

**Customer must satisfy all codes and owners' specifications.** 









PATENT PENDING PATENTED



LABELS APPLY TO PRODUCTS ONLY WHERE SHOWN ABOVE



metallic cylinder with an external diameter equivalent to the largest trade size raceway the support is intended for use with.

9A.2.5. For a conduit or tubing support of a polymeric material, or having a polymeric component, each assembly from Clause 9A.2.4 shall be tested in accordance with Clause 6.6 prior to conducting the load test described in Clause 9A.2.3. The samples shall cool to room temperature before being subjected to the pull test.

#### 9A.3 Resistance to Impact

9A.3.1 As a result of the test described in Clauses 9A.3.2, the conduit or tubing support for use above ground only shall not crack, break, or show other damage that my impair the devices performance.

9A.3.1 Six samples of each type of conduit support being tested is to be exposed for 5 hours to air maintained at minus  $35 \pm 1^{\circ}$ C (minus  $31 \pm 2^{\circ}$  F). Immediately after being removed from the cold chamber, each sample is to be dropped onto a concrete floor from a height of 5 feet (1.52 m).

#### 10 Markings

10.10 The following, where applicable, shall be marked on the conduit or tubing support:

- a.) A catalog number or equivalent designation.
- b.) The largest size and type of raceway the support intended for use with.
- c.) Not for lifting or rigging of raceway bundles or equivalent wording.

10.11 A conduit or tubing support complying with the applicable load requirements of Clause 9A.2.3 shall be allowed to be marked on the device or the smallest unit shipping carton with the reference load rating corresponding to the load rating as specified in Tables10-11.

TABLE 10

### Load requirements for conduit or tubing support (See Clauses 9A.2.3 and 9A.2.4)

		LOAD							
		Electrical Metallic Tubing (EMT) <sup>a</sup>		Rigid Metal Conduit (RMC), Intermediate Metal Conduit (IMC <sup>)a,c</sup>		Rigid PVC Conduit			
Trade Size	(Metric Designator)	Load (N)	Reference Load Rating (kg)	Load (N)	Reference Load Rating (kg)	Load (N)	Reference Load Rating (kg)		
1/2	(16)	667	23	667	23	667	23		
3/4	(21)	667	23	667	23	667	23		
1	(27)	845	27	845	27	712	23		

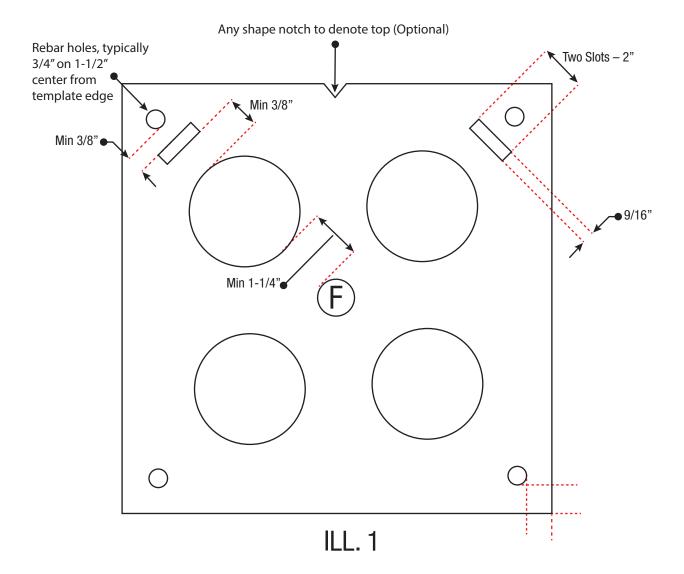


#### **QwikDuct**

Mart: HDPE 3/8" MIN. THICKNESS Overall Rectangle 60" x 120" Maximum Round 60" Maximum OD

**Note:** Basic QwikDuct template to consist of conduit/tubing openings only with optional notch, rebar holes, flow holes, slots per customer request/specs.

Number of conduit/tubing openings dependent on customer request/specs and maintaining minimum material dimension noted.





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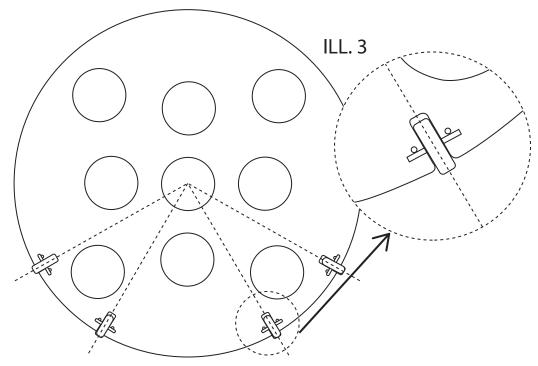
#### ILL. 1

Template - Made of HDPE. The body dimensions can be seen below.
 Minimum thickness is 0.375 inches. Maximum overall template is 60 by 120 inches.
 Minimum dimensions between conduit openings see ILL. 1.
 For products marked cUL, the minimum spacing between conduit openings must be 190mm on center as shown in FIG. 1.

OPTIONAL: may be supplied with footing braces to provide stability. See ILL. 2 for details.

2. Template - Same as above except round template 60 inch maximum diameter.

OPTIONAL: may be provided with wheels to assist with movement during end-use product installation. Provided with two 0.25" bolt holes and one 0.25" x 3" x 0.4375" deep slot per sheel axle/pin. Number and size of wheels may vary depending on intended end-use application. The dimensions of the slots (for the wheels) cut into the round template may vary depending on the size of the required wheels but shall not impede upon the spacing requirements shown in ILL. 1. See ILL. 3. for typical wheel installation.





### CERTIFICATE OF COMPLIANCE

Certificate Number: 201904299-E185948 Report Reference: E185948-20120702

Issue Date: April 29, 2019

Issued to: SP Products, Inc.

730 Pratt Blvd.

Elk Grove Village, IL 6007-5115

This certificate confirms that CONDUIT AND CABLE HARDWARE

representative samples of: Below Ground Conduit and Tubing Supports,

QwikDuct

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate

Standard(s) of Safety: Safety for Hardware for the Support of Conduit,

Tubing and Cable, UL 2239 and CSA C22.2 No. 18.4-15

Additional Information: See the UL Online Certifications Directory at

https://iq.ulprospector.com for additional information

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

Bambles

Bruce Mahrenholz, Director North American Certification Program UL LLC



Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licenses of UL. For questions, please contact a local UL Customer Service Representative at http://ul.com/aboutul/locations/







September 16th, 2022

This is to certify that SP Products, Inc. fabricates the QwikDuct HDPE Duct Bank Templates in United States of America.

Sincerely,

Mikel Bishka

Prefab and Quotations Manager

Mikel Bishling\_

SP Products Inc.

730 Pratt Blvd.

Elk Grove Village, IL 60007



August 7, 2019

To whom it may concern:

SP Products UL Listed QwikDuct Templates have been used in an extended number of federal projects in the past 20 years. See below for past completed jobs:

Ft Polk Lousiana - Coburn Bros. Electric, LA

Oakland Army Base - Oakland, CA - Morrow Meadows CA - Contractor

Project Elizabeth, Washington DC area - Nationwide Electric - Contractor

Department of Energy, Nuclear Weapons Facility - Amarillo, TX - Duke Energy Contractor

Lockheed Martin - Tamps, FL - Doyle Electric Contractor

TVA Bull Run - Department of Energy - Tennessee - ECA Contractor

Cape Canaveral, FL - MIL Conn Contractor

Enclave Kingsbay Submarine Project - MIL Con-Georgia

Austin, TX - Military Base - Bergelectric Contractor

Cottonwood Project - Colorado - Federal Hwy. Project - Northern Electric Contractor

Federal Dep of Aviation - O'Hare Airport - Chicago, IL - Aldridge Electric/BEI Electric Contractors

Please call if you have any questions. Best regards.

Mikel Bishka Prefab and Quotations Manager

SP Products Inc. 730 Pratt Blvd. Elk Grove Village, IL 60007



High Density Polyethylene							
Physical Properties	Metric	English	Comments				
Specific Gravity	0.96 g/cc	0.0347 lb/in <sup>3</sup>	ASTM D792				
Water Absorption	Max 0.01 %	Max 0.01 %	Immersion, 24hr; ASTM D570(2)				
WATER Absorption at Saturation	Max 0.01 %	Max 0.01%	Immersion, ASTM D570(2)				
Mechanical Properties							
Hardness, Shore D	70	70	ASTM D2240				
Tensile Strength, Ultimate	31.7 MPa	4600 psi	ASTM D638				
Elongation at Break	400 %	400 %	ASTM D638				
Tensile Modulus	1.38 GPa	200 ksi	ASTM D638				
Flexural Modulus	1.2 GPa	174 ksi	ASTM D790				
Flexural Yield Strength	31.7 MPa	4600 psi	ASTM D790				
Compressive Strength	31.7	4600 psi	10% Def., 73°; ASTM D695				
Compressive Modulus	0.689 GPa	100 ksi	ASTM D695				
Coefficient of Friction	0.2	0.2	Dry vs. Steel; QTM55007				
Izod Impact, Notched	0.694 J/cm	1.3 ft-lb/in	ASTM D256 Type A				
	Electrical Pro	<u> </u>					
Surface Resistivity per Square	Min1e+015 ohm	Min1e+015 ohm	ASTM D257				
	Thermal Properties						
CTE, linear 68°F	110 μm/m-°C	61 µm/in-°F	(-40°F to 300°F); ASTM E831				
Melting Point	127°C	260°F	Crystaline, Peak; ASTM D3418				
Maximum Service Temperature, Air	82.2°C	180°F	Long Term				
Deflection Temperature at 1.8 MPa (264 psi)	80°C	176°F	ASTM D648				
Flammability, UL94*	HB	HB	1/8 inch				
Qualitative Processing Properties							
Compliance - FDA	Compliant						
Machinability	3		1-10, 1=Easier to Machine				
Service in Alcohols	Acceptable Service						
Service in Aliphatic Hydrocarbons	Unacceptable						



Service in Aramatic Hydrocarbons	Unacceptable		
Service in Chlorinated Solvents	Unacceptable		
Service in Ethers	Unacceptable		
Service in Ketones	Unacceptable		
Service in Strong Acids	Acceptable Service		
Service in Strong Alkalies	Acceptable Service		
Service Sunlight	Limited Service		
Service in Weak Acids	Acceptable Service		
Service in Weak Alkalies	Acceptable Service		

All statements, technical information and recommendations contained in this database are presented in good faith, based upon tests believed to be reliable and practical field experience.

This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.



I. General Information							
Chemical Name & Synonyms High Density Polyethylene		Trade Name & Synonyms: Linear High Density Polyethylene Champline, Sanalite					
Chemical Family Linear High Density Polyethylene		Formula (Ch2-ch2) n					
Proper DOT Shipping Name: N/A		DOT Hazard Classification: N/A					
II. Ingredients							
Principal Components	Percent		Threshold Limit Value (Units)				
Polyethylene (CAS 9002-88-4)	>99%		10 mg/m3 (total dust)				
	III. Phy	sical Data					
Boiling Point (Deg. F.) N/A		Specific Gravity (H20=1) 0.96-0.97					
Vapor Pressure (mm Hg) N/A		Percent Volatile By Volume (%)					
Vapor Density (Air=1) N/A		Evaporation Rate (Air=1) N/A					
Solubility in Water Negligible		pH N/A					
Appearance & Odor Waxy Solid, White with Waxy Odor							
IV. Fire & Explosion Hazard Data							
Flash Point (Test Method) Auto Ignition Tempe (Setchkin) 370°C (700 °F)	rature	700°F (370°C) ASTM-D-1929 Method B					
Flammable Limits LEL N/A N/A			UEL N/A				
Extinguishing Media Water, Foam, Carbon Dioxide, Dry Chemical, Synthetic Foams, Alcohol Resistant Foams							
Special Fire Fighting Procedures: Soak thoroughly with water to cool and prevent re-ignition. The smoke can contain polymer fragments of varying composition, in addition to unidentified toxic and/or irritating compounds.							
Unusual Fire & Explosion Hazards Combustion by-products include, but are not limited to, carbon dioxide and carbon monoxide.							



V. Health Hazard Data						
OSHA Permissible Exposure Limit	ACGIH Threshold Limit Value					
15 mg/m3 Total dust, 5 mg/m³ respirable dust	10 mg/m³ (total dust)					
Carcinogen - NTP Program - NO	Carcinogen - IARC Program - NO					
Symptoms of Exposure – None Known						
Medical Conditions Aggravated By Exposure						
None known, however, seek medical attention if constant irritation occurs. If thermal decomposition occurs, respiratory, eye,						
nose, and throat irritation may result.						
Primary Route(s) of Entry – Inhalation of particulates.						
<b>Emergency First Aid</b> — Molten material. If molten material comes in	•					
attempt to remove the molten material from the skin. Get medical att						
VI. Reactivity D						
STABILITY Unstable X Stable	Conditions To Avoid — <b>None Known</b>					
INCOMPATIBILITY	Materials To Avoid – <b>Strong Oxidizing Agents</b> Conditions To Avoid – <b>None Known</b>					
Hazardous Polymerization May Occur _X _Will Not Occur	Conditions to Avoid — Notic Known					
Hazardous Decomposition Products: Alphatic Hydrocarbons	See Bornel and					
VII. Environmental Protection Procedures						
Spill Response Sweep up for disposal or reuse.	and an account to Fordered Chate and I and manufacture					
Waste Disposal Method Incineration or landfill - dispose of in accordance with Federal, State and Local regulations.						
VIII. Special Preca	autions					
Eye Protection — Glasses with side shields in dusty conditions.						
Skin Protection – Use insulated gloves when handling molten material.						
<b>Respiratory Protection</b> (Specific Type) — NIOSH approved dust respirator recommended. If material is being burned wear an organic respirator.						
Ventilation Recommended – Local ventilation in dusty conditions, or if thermal decomposition occurs.						
Other Protection — Gloves and protective garments when handling molten material.						
IX. Special Precautions						
Hygienic Practices In Handling & Storage – Wash with soap and water.						
Precautions For Repair & Maintenance Of Contaminated Equipment – Eliminate ignition sources.						
Other Precautions — Store in a sprinkler protected warehouse. Since High density is a polyethylene, it will burn wit a hot flame if ignited. Avoid contact with ignition sources such as open flames. Keep a fire extinguisher near if welding is done in the area of High Density Polyethylene. If a heat source is present, keep the area well ventilated.						
	HMIS CODE: Fire 1, Health 1, Reactivity 0					



#### X. Regulatory Information

**OSHA Status** – 15 mg/m3 Total dust, 5 mg/m³ respirable dust

**TSCA Inventory Status** – All ingredients are listed.

CERCLA Reportable Quantity (RQ) - None

SARA Title III -

**Section 302/304** – No extremely hazardous substances

**Section 311/312** – No reporting requirements although it is suggested that storage of >10,000 lbs of polyethylene in one facility should be listed on a Tier II report.

**Section 313** – No reporting requirements.

Hazard data contained herein was obtained from raw material suppliers. The information presented is believed to be factual, as it was derived from the works and opinions of persons believed to be qualified. However, no facts contained in the information are to be taken as a warranty, or representation, for which SP Products Inc. bears legal responsibility. The user should review any recommendation in the specific context of the intended use to determine if they are appropriate.