



دوراھتل
أرييا إندستري
DURRAHTEL
ARABIA INDUSTRY

www.durrahtel.com

Catalog

PECD DUCT

More than
pipes.

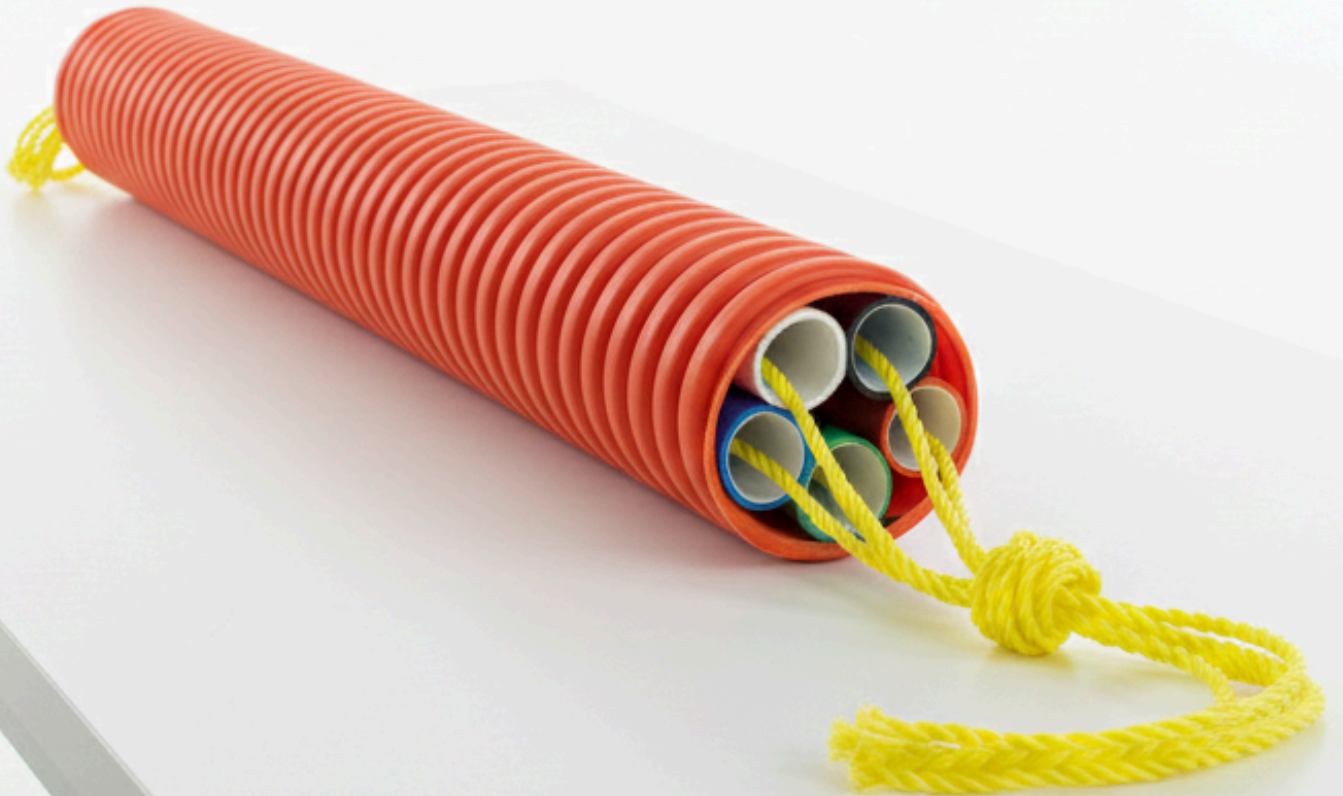


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About Us

Who We Are



Durrahtel Arabia Industry is a strategic global joint venture established in 2026 to support Saudi Arabia's infrastructure growth under Vision 2030, combining over 30 years of collective expertise from two industry leaders: Process Pipes (Dubai, since 2014) — a major industrial supplier delivering piping solutions to large-scale giga projects across Dubai and the GCC — and Modern Solutions Company (Saudi Arabia, since 2022). Together, we unite international experience with strong regional presence, operating across Saudi Arabia, Dubai, Germany, India and the United States to deliver high-performance solutions for major infrastructure and industrial developments.



Visit Our Office Location



Omar Ibn Al Khattab Rd, Al Malaz,
3403 Prince Fahad Ibn Ibrahim Al
Saud St, Riyadh 12644

إلى طريق عمر بن الخطاب رضي الله
عنه، الملز، 3403 شارع الأمير فهد بن
إبراهيم آل سعود، الرياض 12644،
المملكة العربية السعودية



 **MODERN SOLUTIONS**

 **PROCESS PIPES**

Our Vision

Vision

To become the leading provider of innovative, sustainable, and high-quality pipeline and infrastructure solutions in the Kingdom of Saudi Arabia and beyond.

We aim to set new industry benchmarks through advanced technology, exceptional customer service, and responsible environmental practices — building reliable infrastructure for future generations.

To lead the industry in sustainable and innovative solutions. And to support and contribute to Saudi Arabia's Vision 2030 by strengthening local manufacturing, advancing infrastructure development, and delivering world-class products that power the Kingdom's future.



Our Mission

Let us achieve our great mission together.



Mission 1

To manufacture high-quality, standards-compliant pipeline and cable protection systems that ensure safety, reliability, and long-term performance.

Mission 2

To enhance Saudi Arabia's infrastructure growth through local production, technological innovation, and sustainable industrial practices aligned with Vision 2030 objectives.

Mission 3

To build strong partnerships by delivering consistent quality, competitive pricing, and timely project support across the Kingdom and international markets.

Meet Our Team

Eng Zamir Ahmad

Chief Operating Officer (COO)



Eng Mohammed Zuber

Chief Executive Officer (CEO)



Eng Fahad Alanazi

General Manager (GM)



Eng Mohammed Zaheer

Chief Financial Officer (CFO)



Durrahtel Arabia Industry was established by visionary founders with extensive experience in infrastructure manufacturing and industrial development. With a strong commitment to quality, innovation, and long-term growth, they laid the foundation for a company built on integrity, engineering excellence, and alignment with Saudi Arabia's Vision 2030. Their leadership continues to guide the company toward sustainable expansion and global competitiveness.

Our Service

Delivering comprehensive infrastructure solutions with quality, precision, and reliability across every project stage.

Infrastructure Product Manufacturing

We manufacture high-performance HD-PECD pipes, ducts, warning tapes, spacers, and cable protection systems using advanced production technology and strict quality control to meet international standards.

Custom Engineering & Project Solutions

We provide project-specific design support, product customization, and technical consultation to meet the unique requirements of water, telecom, power, sewage, and gas infrastructure projects.

Nationwide Supply & Logistics Support

With a strong distribution network across Saudi Arabia, we ensure timely delivery, reliable supply chain management, and export services for regional and international projects.



Our Certifications



Product Manufacturing Roadmap

Raw Material Procurement –

Careful sourcing of certified HDPE, PVC, PP, and performance additives from approved suppliers to ensure premium quality standards.

STEP 1

Material Inspection & Testing –

Automated extrusion and forming processes with precise temperature control, dimensional monitoring, and continuous in-line quality checks.

STEP 2

Advanced Production

Process – Automated extrusion and forming processes with precise temperature control, dimensional monitoring, and continuous in-line quality checks.

STEP 3

Quality Assurance &

Certification – Finished products are tested for strength, pressure resistance, durability, and compliance with international standards before approval.

STEP 4

Packaging & Timely Delivery –

Secure packaging, batch traceability, and efficient nationwide & international logistics to ensure safe and on-time project delivery.

STEP 5

ARAMCO VENDOR



SEC VENDOR

**Subject : Successful Vendor Registration Confirmation**

Dear Durrahtel Arabia Industry Company,

Greetings,

We are pleased to inform you that your company, Durrahtel Arabia Industry Company, has been successfully registered in the Saudi Energy vendor system.

Registered Vendor Details:

Vendor No: **2016731**
Name: **Durrahtel Arabia Industry Company**
City: **Riyadh**
Postal Code: **12629**
Country: **Saudi Arabia**
Telephone: **+966566901736**
Street: **Mujahid Street**

Your registration has been completed, and your company details are now available in our records for future business opportunities and procurement processes.

We appreciate your interest in working with Saudi Energy and look forward to potential cooperation in upcoming projects.

Should you require any further assistance, please do not hesitate to contact us.

Best regards,

Saudi Energy
Vendor Registration Department

You are receiving this email because your customer, Saudi Energy, has identified you as the appropriate contact for this correspondence. If you are not the correct contact, please contact Saudi Energy.

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Powered by  SAP Ariba

PE COD

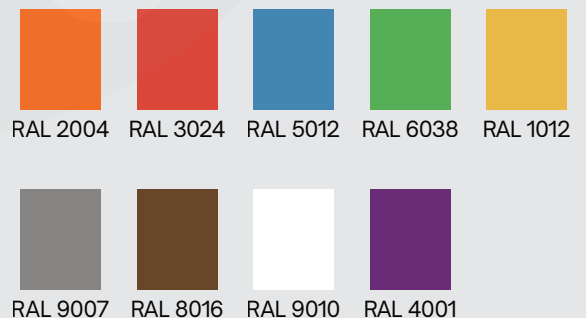
What is COD? Durrahtel's Corrugated Optical Duct (COD) is an advanced multi-channel cable management system, designed to optimize underground cable installations. Engineered with high-density polyethylene (HDPE), COD consists of a plain inner pipe and a corrugated outer pipe, seamlessly integrated for enhanced flexibility, durability, and efficiency. Corrugated optical ducts system comprises of a corrugated outer sheath and optional internal multiple micro ducts. Corrugated outer sheath is made of HDPE. Micro ducts are made from High Density Polyethylene (HDPE), whilst the inner surface of the micro ducts is made from permanent silicon material having a very low coefficient of friction. Factory bundles 3-way, 4-way, 5-way and 7-way configurations.



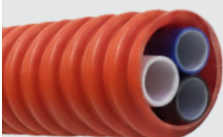
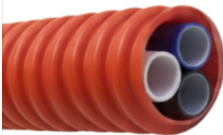
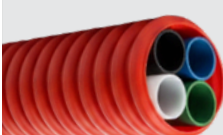
Area of applications

- Telecommunication network expansion
- CATV (television cables) and CCTV networks
- High speed fiber optic internet lines
- Medium and low voltage power cables
- Underseas communication networks

Colors Available

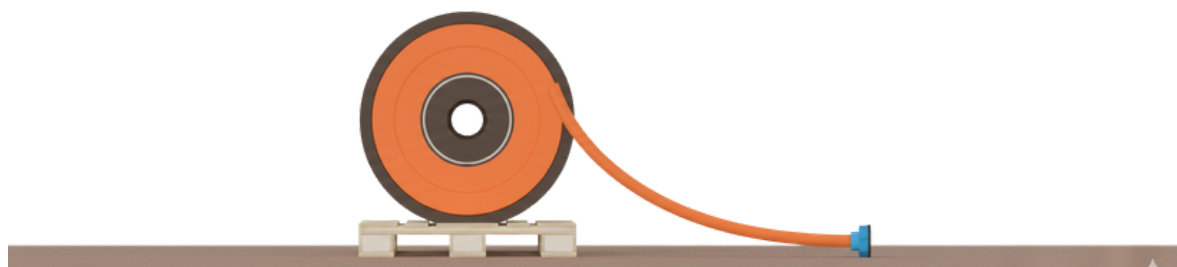


Product Range

Type	Design Configuration	Outer Diameter (OD) mm	Inner Diameter (ID) mm	Wall Thickness mm
 COD Empty	COD Main Duct	77 ± 2	58 ± 2	2.5 ± 0.5
 COD Empty	COD Main Duct	110 ± 2	90 ± 2	2.5 ± 0.5
 COD with 7 Subducts	COD Main Duct	110 ± 2	90 ± 2	2.5 ± 0.5
	Sub-ducts	29 ± 1	25 ± 1	2.0 ± 0.2
 COD with 5 Subducts	COD Main Duct	110 ± 2	90 ± 2	2.5 ± 0.5
	Sub-ducts	33 ± 1	28 ± 1	2.5 ± 0.5
 COD with 3 Subducts	COD Main Duct	77 ± 2	58 ± 2	2.5 ± 0.5
	Sub-ducts	27.2 ± 1	22.2 ± 1	2.5 ± 0.5
 COD with 3 Subducts	COD Main Duct	110 ± 2	90 ± 2	2.5 ± 0.5
	Sub-ducts	42 ± 1	36 ± 1	3.0 ± 0.5
 COD with 4 Subducts	COD Main Duct	110 ± 2	90 ± 2	2.5 ± 0.5
	Sub-ducts	38 ± 1	32 ± 1	3.0 ± 0.5

Technical Data

Property	Value	Test Method
Compound Density @ 25°C	$\geq 0.95 \text{ g/cm}^3$	ASTM D1505
Pipe Stiffness @ 5% Deflection (7x29 mm)	$> 27 \text{ kgf/cm}^2$	ASTM D2412
Pipe Stiffness @ 5% Deflection (5x33 mm)	27 kgf/cm^2	ASTM D2412
Pipe Stiffness @ 5% Deflection (3x42 mm)	21 kgf/cm^2	ASTM D2412
Compressive Strength (7x29 mm)	$> 1,200 \text{ kgf/m}$	ASTM D2412
Compressive Strength (3x42 mm)	950 kgf/m	ASTM D2412
Tensile Strength @ Yield	30 MPa	ASTM D882
Elongation @ Break	4.00	ASTM D882
Nominal Pressure (Sub-Duct)	16 Bar	SASO 15
Hydrostatic Strength (Sub-Duct)	8 MPa	ASTM D2837
ESCR (Environmental Stress Crack Resistance)	192 hrs, Condition C	ASTM D1693
Carbon Black Content (Black)	$\geq 2\%$	ASTM D1603
Water Absorption	$\leq 0.03\%$ (24 hrs)	ASTM D570
Voltage Resistance	2,000 Vac > 15 min	—
Insulation Resistance	$\geq 200 \text{ M}\Omega$	—



PECD Accessories

Discover a complete range of high-performance PECD accessories designed to meet your project needs with strength, reliability, and precision.



Sub-Duct Coupling



Spacers



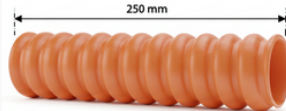
PECD Connectors



PECD Manhole
Connector



PECD Connectors



PECD Coupling



COD End Caps



Sub-duct End-cap



COD Cutter



COD connecting jig

COD Installation Guide

www.durrahtel.com

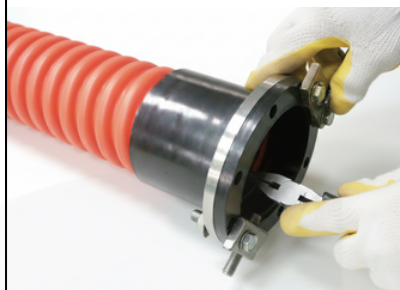
Striping Outer Duct

Step 1



Set the two ends of the ducts to be joined. Mark each end of the duct to 13 cm from duct end

Step 2



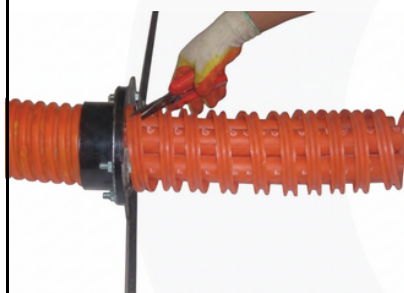
Put the cutter into the outer duct

Step 3



Pill off the skin of COD spinning right

Step 4



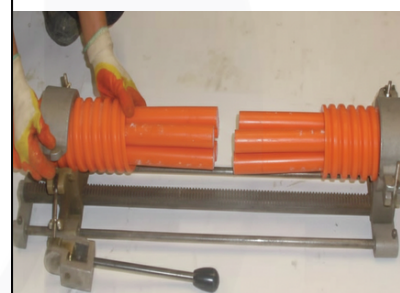
Cutting Skin of COD and remove COD cutter spinning left

Step 5



Trimming Sub-duct and complete

Step 6



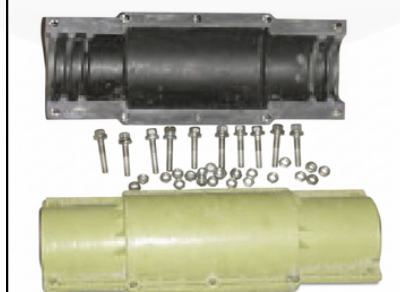
To clamp and secure both ends of the COD ducts

Step 7



Insert couplings into each sub-duct and clamp beside the lever arm. Operate the lever to align the ducts. Guide the couplings to connect with the opposite sub-ducts.

Step 8



Close and cover the joint by placing one part below (covering two grooves) and the other part on top to secure it

Step 9

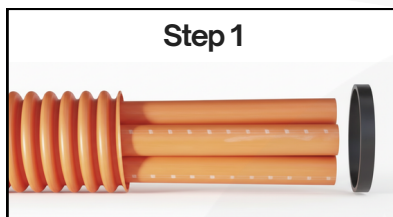


Tighten the bolts of the closure. The completed PECD jointing is as shown.

COD Manhole Connectors TYPE I

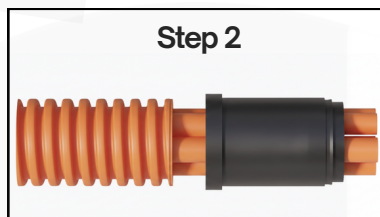


COD Manhole connector M,L
Body: PE Cap: PP (PP 90% + PE 10%)
Fixing cover:(PP 90%+PE 10%) -Rubber gasket



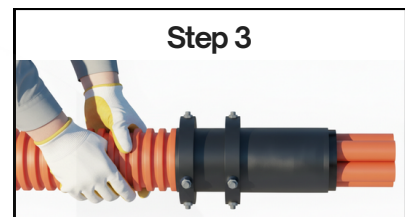
Step 1

Remove outer layer: use the outer layer remover to remove about 50cm of outer layer.



Step 2

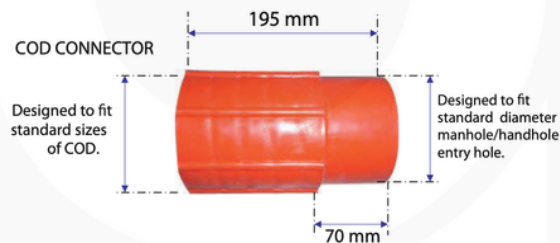
Insert Body of Manhole Connector, Place the Body in the correct position.



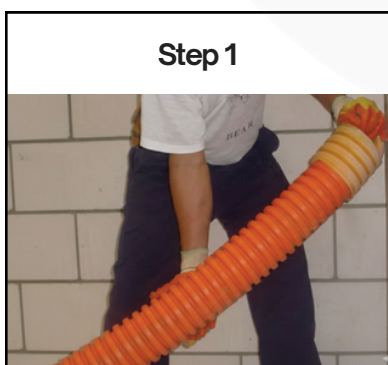
Step 3

use bolts and nuts to connect the body with the upper and lower fixing covers. Complete The Installation.

COD Manhole Connectors TYPE II



Jointing COD to Manhole



Step 1

Pull the COD duct up to the manhole or hand-hole wall.



Step 2

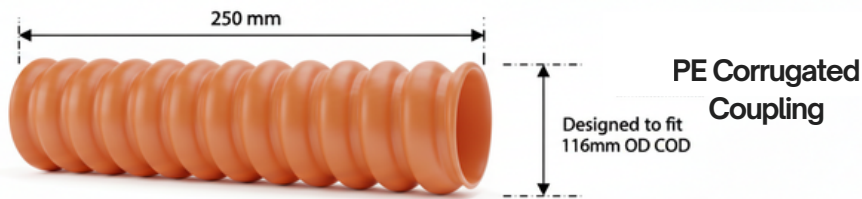
Use COD Connector to connect COD duct into MH or HH entry hole. Apply duct solvent cement



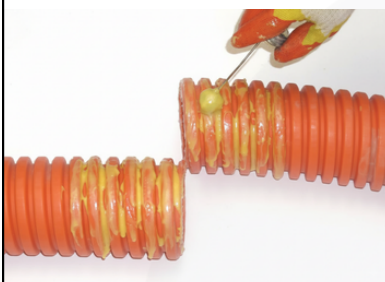
Step 3

Insert the COD duct into the MH or HH entry hole.

COD Connector Type III for Empty Duct



Step 1



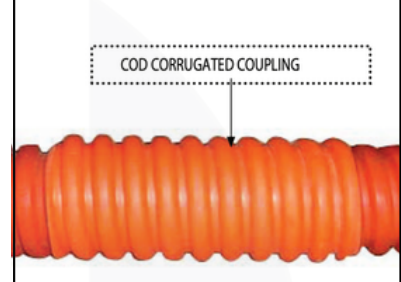
Apply duct cement around the ducts, 15 cm from duct ends.

Step 2



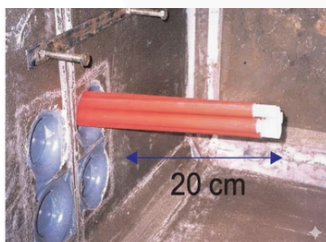
Use COD CORRUGATED COUPLING, for jointing the two ducts. Screw the full length of the Coupling into one end of COD

Step 3

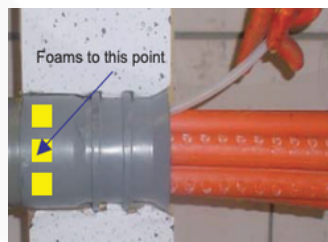


COD CORRUGATED COUPLING after connection

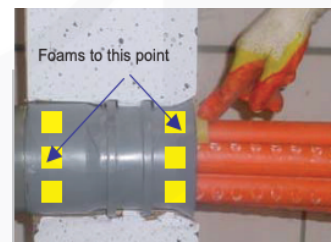
Sealing of Installed COD Duct



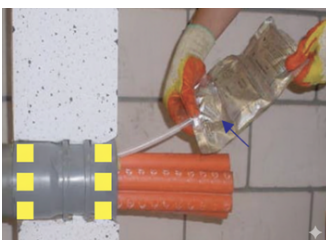
Insert the COD into the MH or HH entry hole. The sub-ducts shall protrude outside the hole by approx. 20 cm.



First, insert foams around the spaces at one end of the duct terminator.



Insert foams near the hole's opening.



Prepare the Plugging Compound and inject between the foam barriers.



Completed Installations

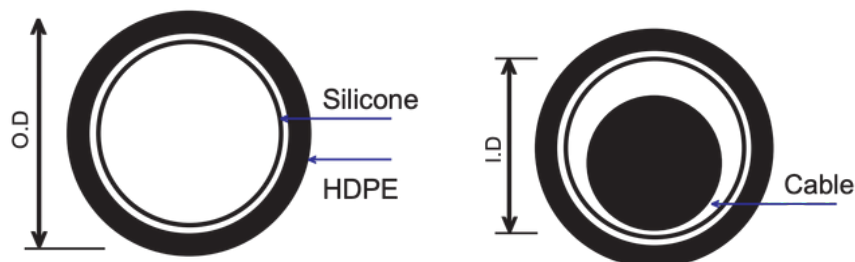
SSD - Silicone Sub Duct

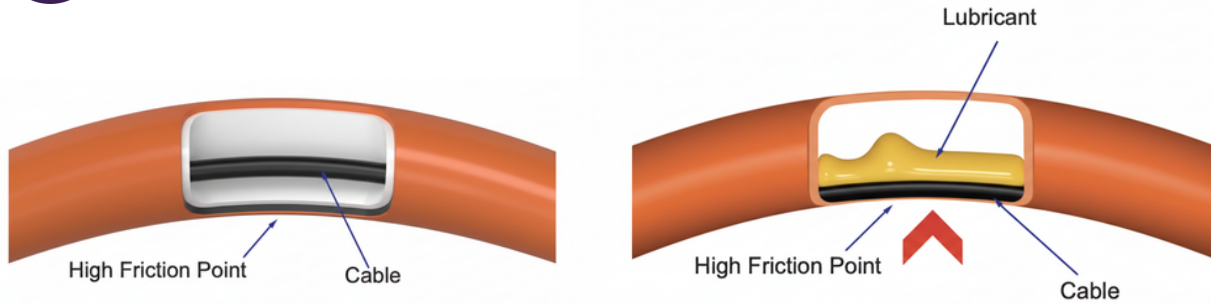
Silicone Sub Duct (SSD) is manufactured from virgin, flexible HDPE and is specifically designed for Optical Fiber and Copper Cable networks. Its superior flexibility allows easy sweeping to create gradual bends without the need for special forming equipment, ensuring faster and more efficient installation. The duct offers outstanding resistance to natural and mechanical damage, providing long-term durability in demanding environments. The inner wall is permanently silicone-coated, forming a solid, slick lubricant layer that significantly enhances cable installation performance. With up to 80% reduction in coefficient of friction compared to non-silicone ducts, SSD ensures smooth cable blowing and pulling while delivering complete cable protection before, during, and after installation.

Inside Diameter (mm)	Thickness of Silicone Coated Wall (mm)
22	0.4 ± 0.1
25	0.5 ± 0.1
29	0.5 ± 0.1
35	0.5 ± 0.1

Advantages

- Silicone coating lasts as long as the duct itself
- Does not evaporate, burn out, or degrade due to heat or friction
- Does not dry out under high air volume
- Industry-standard lubrication preferred by global network builders
- Coefficient of friction remains stable over time
- Fully supports both blowing and pulling installation methods





Sub-Duct Design: Inner and outer walls are smooth and plain, with a low coefficient of friction to enable easy cable installation by blowing.

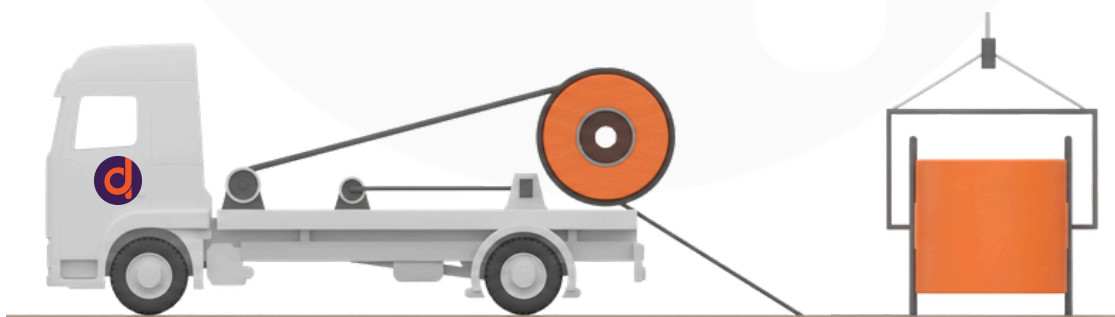
Fusion: Main duct and built-in sub-ducts are fused during extrusion to prevent movement or twisting in the finished product.

Color Identification: Sub-ducts match the main duct color, with one sub-duct in a distinct contrasting color for easy identification.

Category	Test Name	Performance Requirement			Related Standards
Mechanical Properties	Tensile Strength	180 kgf/cm²			KS M 3006
	Coefficient of Friction	0.30 Below			Bellcore Spec
		Division	5% strain (kgf or higher)	Inner contact (kgf or higher)	
	Compressive Strength (Flat)	22mm	4	33	KS M 3413
		25mm	7	50	
		29mm	10	100	
		35mm	14	130	
	Compression Resilience	Recovery rate > 10.0%			KS C 8454
	Heat Deformation	Strain ≤ 3.0%			KS M 3408
	Impact	No cracks permitted			KS C 8454
Chemical Properties	Chemical Resistance	HCl Aqueous Solution: Change in weight ≤ 12 g/m²			KS M 3407
		NaOH Aqueous Solution: Change in weight ≤ 12 g/m²			
		Polyethylene Glycol: ≤ 12 g/m²; No surface change or delamination			

Storage Guidelines

Store COD systems sealed with transport or heat-shrink caps to prevent contamination. Keep drums on the provided support frame on level ground to avoid damage or deformation. UV-stabilized ducts may be stored outdoors temporarily; for storage beyond one year, cover with an opaque sheet. Transport, storage, and installation temperature range: -10°C to $+50^{\circ}\text{C}$. Avoid impact below -15°C and mechanical loads above $+50^{\circ}\text{C}$. Account for thermal expansion: HDPE changes 0.2 mm per meter per 1°C (e.g., 100 m duct expands/contracts ~20 cm with 10°C variation). Always seal cable ends with proper end caps; do not use tape. Position the drum in line with the deployment direction to prevent cable rubbing against the flange. Transport drums using suitable vehicles and handle carefully during loading/unloading. Do not roll drums on the ground to uncoil ducts — always use a drum trailer or installation trolley. When uncoiling, pull the micro duct bundle straight from beneath the drum — never from the side flange. Keep the bundle under tension during unwinding and brake the drum from the first meter to avoid spiral unwinding.



Our Products



Telecom PEC Ducts

At Durrahtel Arabia Industry, we offer a comprehensive range of high-performance pipeline and cable protection solutions designed to meet the evolving demands of modern infrastructure projects. Manufactured to international standards and engineered for durability, safety, and long-term performance, our products support water, telecom, power, sewage, and industrial networks across Saudi Arabia and beyond.



Bundle Microduct

Pipe spacers

Flexible Corrugated
Couduit

Telecom Accessories



HDPE Pipes

DWC-HDPE Corrugated
Pipe

Warning Tape

Marker Post

Our Portfolio

Durrahtel Arabia Industry has proudly contributed to major infrastructure developments across the region by supplying high-performance pipeline and ducting solutions.

1000 MW Al Masa'a Solar Power Plant – Al Hail

Delivered over 400+ km of DWC HDPE corrugated pipes for underground cable protection and renewable energy infrastructure.



King Salman International Complex for Maritime Industries & Services – Ras Al Khair

Supplied over 100+ km of HDPE pipes supporting large-scale marine and industrial infrastructure networks.



Salman Park Project – Riyadh

Supplied over 40+ km of HDPE pipes for electrical and utility network development within the project.



PECD 4 & 5 Subduct FTTH Project – Riyadh

Delivered over 100+ km of PECD ducts and subduct systems supporting fiber-to-the-home (FTTH) telecommunications infrastructure.



Our Clients

At Durrahtel Arabia Industry, we are proud to partner with leading government entities, mega-project developers, contractors, and infrastructure companies across the Kingdom of Saudi Arabia and beyond. Our commitment to quality, reliability, and on-time delivery has earned the trust of clients operating in water, power, telecommunications, oil & gas, renewable energy, and industrial sectors.



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