



forever safe

CONTENTS



About us

Quick Info



Innovation

New technologies in plastic piping systems



Product Series

For cable management & protection



Product Series

For sewage & drainage

1979

**It all begins when
Emmanuel Kouvidis, an
electrician-installer begins
producing the first plastic
conduits in his father's
café in the village of
Tylissos in Crete, Greece.**



Today

We are one of the largest Greek plastic pipe manufacturers, specialized in the development and production of plastic piping systems for cable management & protection, sewage & drainage





KOUVIDIS

2010

KOUVIDIS

2021





KOUVIDIS
2022

01

OUR PREMISES

5,5€ million investment

- New production area
- New office building
- Warehouse expansion
- New quality lab
- New facilities
- 7000m² more space



KOUVIDIS 2010



KOUVIDIS 2021



NEW PREMISES - KOUVIDIS 2022



**for 40+ years we design and produce the
SAFEST plastic piping systems for cable
protection, sewage and drainage...**

ABOUT US

Quick info



01

ABOUT US

QUICK INFO



>40 years
of specialization in the production
of plastic piping systems



2 subsidiaries
in Cyprus and Germany



1 subsidiary
specialized in the supply
chain management industry



31 exporting
countries



4 distribution centers
in Greece (Heraklion, Athens,
Thessaloniki) & Cyprus (Nicosia)



23 patent
degrees



18 fully automated
production lines

01

SUSTAINABILITY QUICK INFO



14 years

Implementation of management systems
for quality, employees & environment
(ISO 9001, ISO 14001, ISO 45001)



100%

Recyclable packaging



52

Privately owned low emission
vehicles



30%

Renewable energy sources

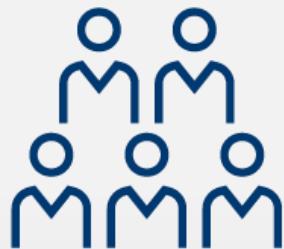


100%

Energy saving
KNX, BMS

01

OUR PEOPLE QUICK INFO



100+
Employees



Best workplaces

Distinction among the 25 best workplaces in Greece (2017)



30%

Increase of employees during the last two years (2019-2021)

01

QUALITY ORIENTED PRODUCTS

QUICK INFO



VDE RoHS complied

VDE and Bureau Veritas marks approval for most of our products

VDE Approved Place of Manufacture

VDE test reports according to EN 50642, EN 61034-2, EN 60764-2 for our halogen free series

KLS KOUVIDIS LOGISTICS

new subsidiary company specialized in
the supply chain management industry

**Awarded for the
verticalization in the
supply chain – reversing
a transportation
disadvantage into an
advantage**



01

OUR GLOBAL PRESENCE

QUICKINFO

31

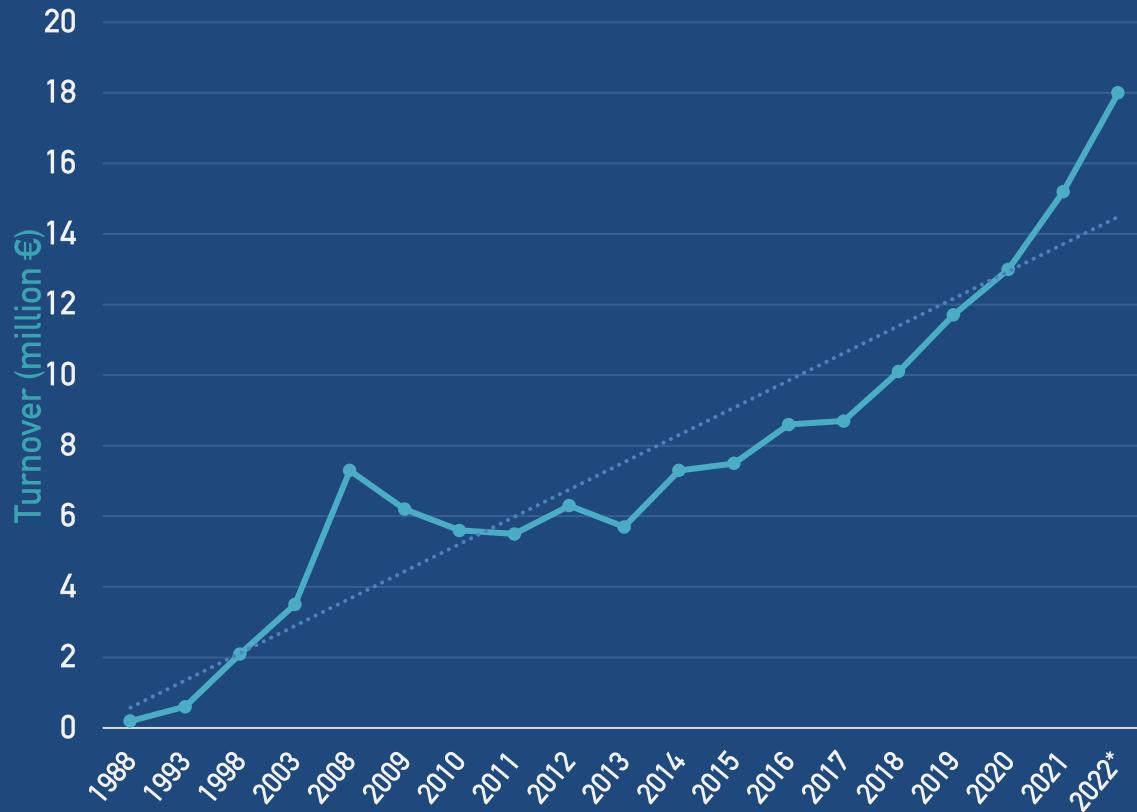
Countries, including 2 subsidiaries
and exclusive distributors



01

DATA SALES

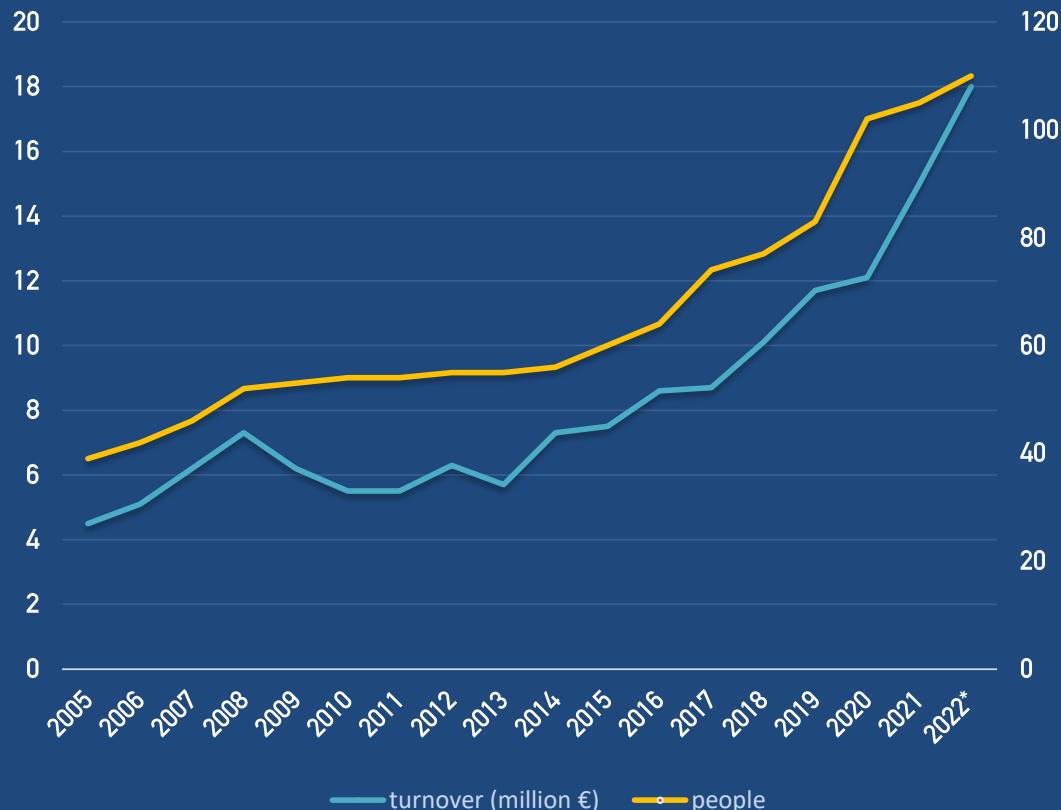
+75%
Over the
last 5 years



*estimation based on on-going performance and predictive analytics

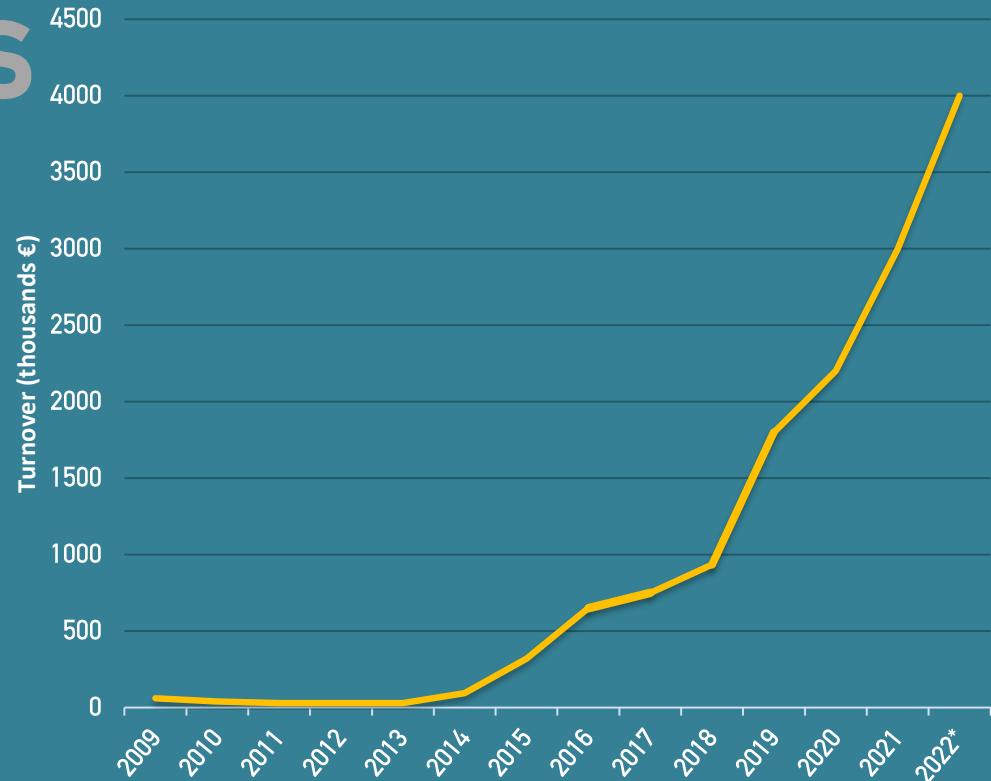
DATA OUR PEOPLE

+75%
Increase of
employees
over the last
5 years



DATA OUR EXPORTS

Export activity



REFERENCES QUICK INFO

We design and develop products that meet the highest expectations, installed in the largest construction projects with zero nonconformities

42 selected application fields



Public
buildings



Commercial
buildings



Residential
buildings



Infrastructure



RES projects



Falirikos Ormos, Greece



Marina Limassol, Cyprus



AFI Park Mall, Romania



Costa Navarino, Greece



Six Student Residences, Cyprus



14 airports Fraport, Greece



Marina Ayia Napa, Cyprus



Piraeus III Floating dock, Greece



Solar Power Plants, Turkey



One Mircea Eliade, Romania



Egnatia highway, Greece

INNOVATION

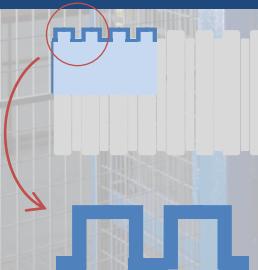
New technologies in plastic piping systems

2

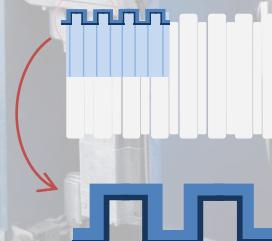
NEW GENERATION MULTI-LAYERED CONDUITS

1 LAYER

corrugated

**2 LAYERS**

corrugated (both internally and externally)

**3 LAYERS**

Two corrugated and one smooth (internal)

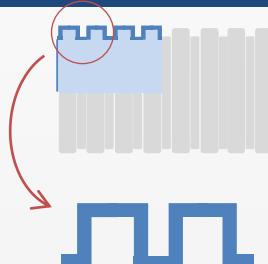


2

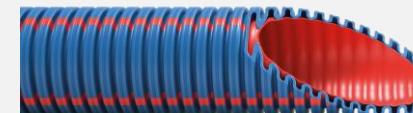
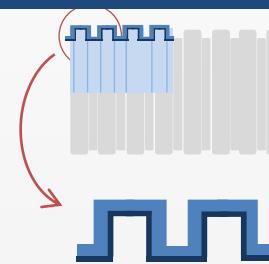
NEW GENERATION MULTI-LAYERED CONDUITS

**1 Layer**

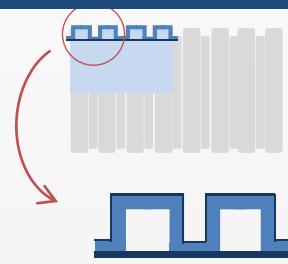
corrugated

**2 Layers**

corrugated (both internally and externally)

**3 Layers**

Two corrugated and one smooth (internal)



2

MULTI-LAYERED CONDUITS

KOUVIDIS



- KOUVIDIS becomes the 1st purely Greek company that produces double structured wall conduits **GEONFLEX**

2012**2015****2019****2020****2022**

Production of the structured double structured wall conduits **GEOSAN** & **GEODRAIN** for sewage and drainage.

Launch of **SUPERFLEX PLUS** conduit

- Launch of **DUROFLEX PLUS** conduit

Launch of **GEODRAIN PLUS**
The 4-layered conduit for drainage

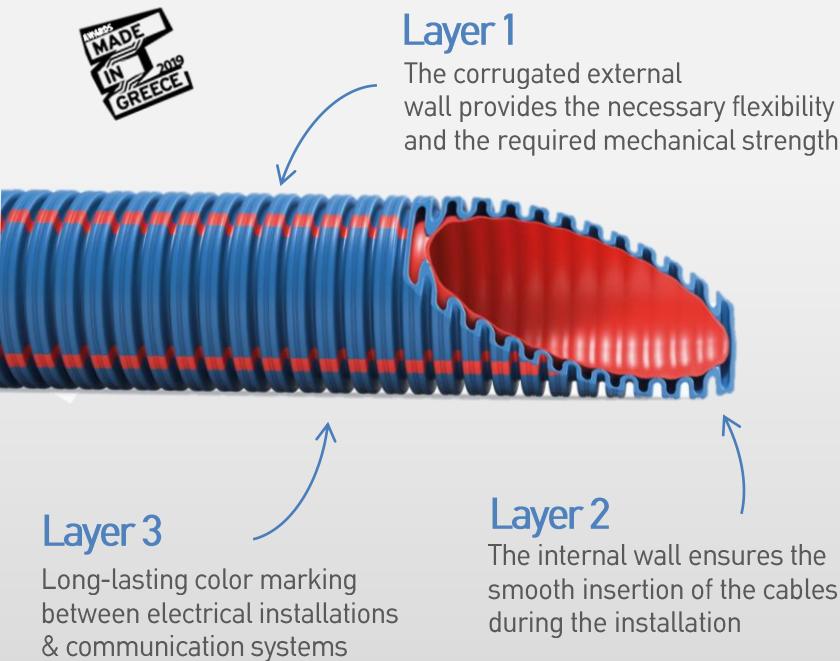


DUROFLEX PLUS

For concealed type installations in concrete

2.1

DUROFLEX PLUS (750Nt) DOUBLE WALL CONDUITS



Ø20 – Ø32

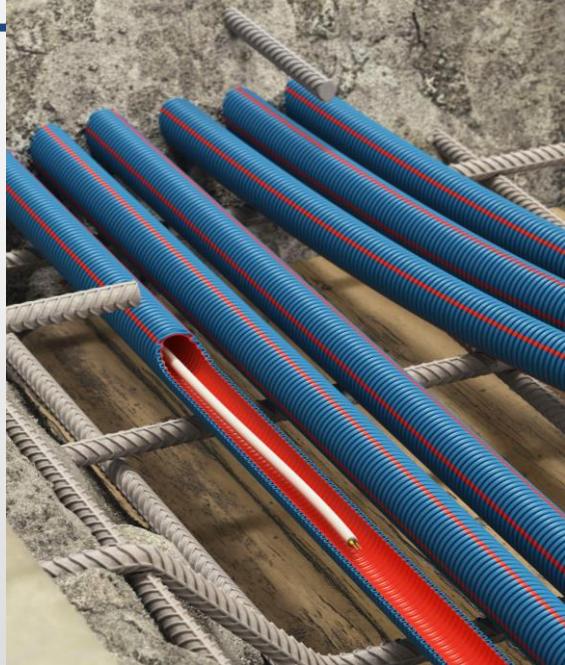
Applying its manufacturing know how on structured wall conduits in small diameters, KOUVIDIS becomes **the first company in Europe** daring such an investment.

Installations in concrete



2.1

DUROFLEX PLUS (750Nt) FASTER & EASIER



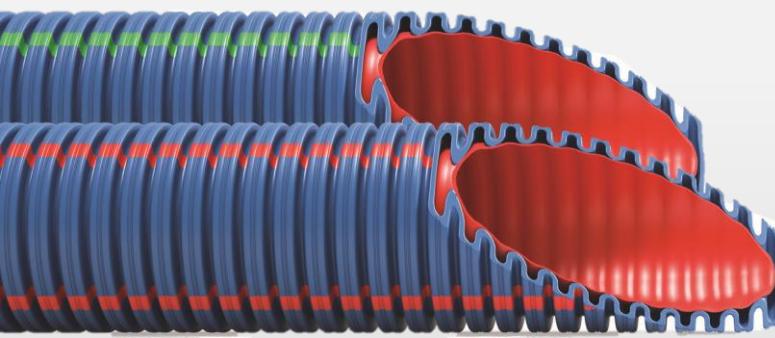
50%

LOWER FRICTION
(IEC/TR 62470)

2.1

DUROFLEX PLUS (750Nt) PROPERTIES

Class: 33332



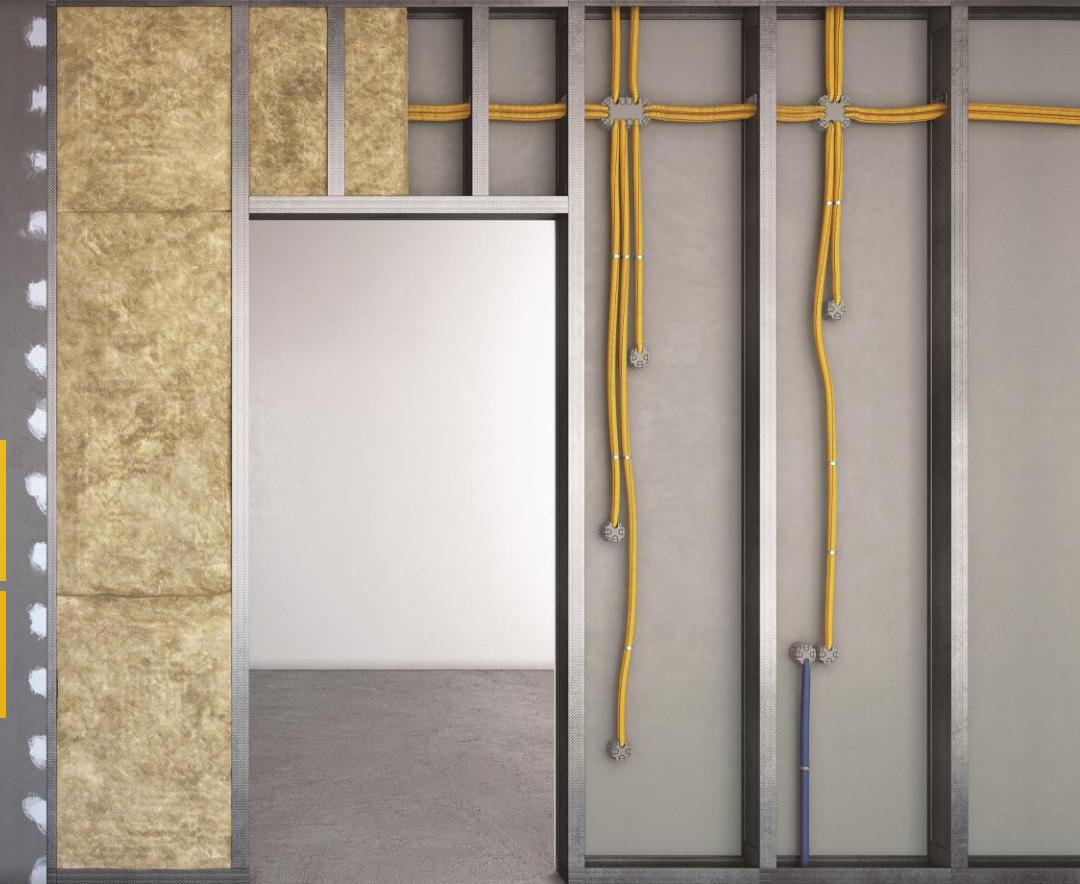
— Power cables

— Telecommunication
cables

- Special **ultra slip material** is added in the internal layer, ensuring the smooth insertion of cables
- **Color marking** indicating the power of the protected cables.
- Very good performance over **concrete** chemical substances
- High mechanical resistance in **high temperature** of 105°C
- The internal layer incorporates **animal repellent**
- Made from **halogen free** raw materials based on PP
- **Low smoke** emission during combustion

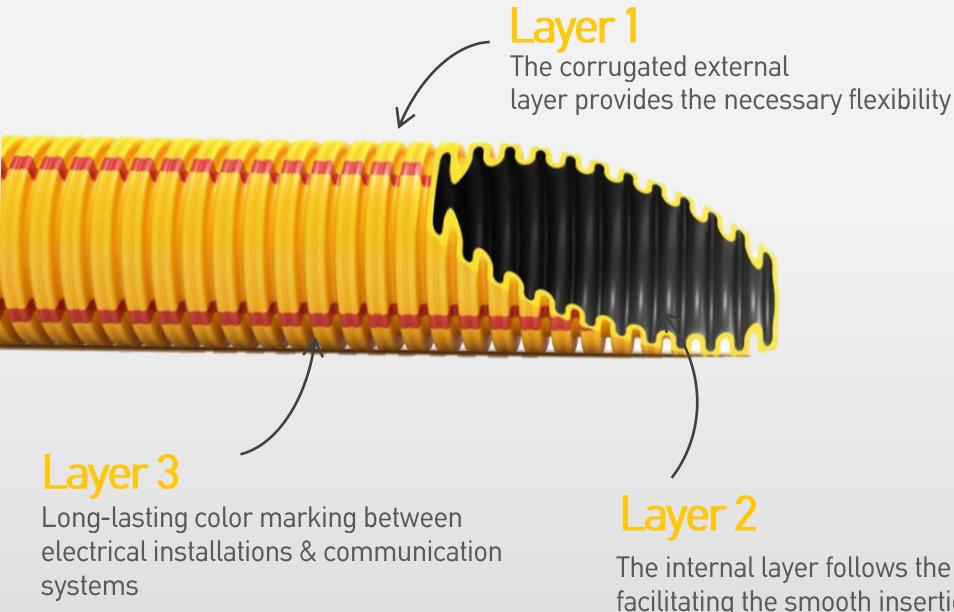
SUPERFLEX PLUS

For concealed type installations in
plasterboard, cavity wall & sub-ceiling



2.2

SUPERFLEX PLUS (320Nt) 3LAYER CONDUIT



Ø16 – Ø32

New generation of three-layer conduits with **anti-electromagnetic technology**

Installations in plasterboard, cavity wall and sub-ceiling



2.2

SUPERFLEX PLUS (320Nt) ANTI-ELECTROMAGNETIC TECHNOLOGY



Need

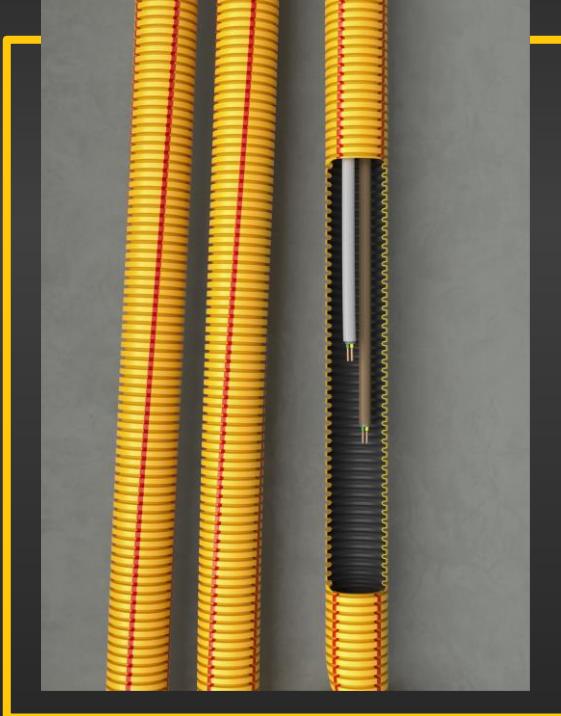
All cabling, both in residences and business premises, that is used to transfer energy and provide supply to electric devices, creates so-called low-frequency magnetic fields, as well as electric fields, that remain even after the devices have been inactivated.

Importance

Thanks to anti-electromagnetic technology, part of the radiation originating from cabling is isolated within the interior layer of SUPERFLEX PLUS conduits, while the interference created between circuits (weak and strong currents) is minimized.

2.2

SUPERFLEX PLUS (320Nt) ANTI-ELECTROMAGNETIC TECHNOLOGY



How does it work

We developed a ground-breaking polymer of a special composition, where metal elements of low particle size are added to the interior layer of the new plastic conduits, thus shielding part of the electromagnetic radiation generated by the electrical cables.

The interior of the conduit functions as a shield against these fields, while its exterior protects the internal cables, in accordance with the requirements of European standard EN 61386-22.

Application field

This technology is ideal for plasterboard partition walls or cavity walls, in spaces such as office buildings, hotel rooms and residences

2.2

SUPERFLEX PLUS (320Nt) FASTER INSTALLATION



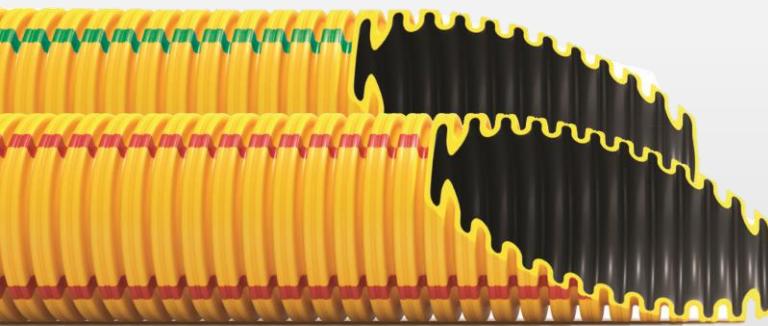
40%

LOWER FRICTION
(IEC/TR 62470)

2.2

SUPERFLEX PLUS (320Nt) PROPERTIES

Class: 23332



Power cables

Telecommunication cables

- The inner layer incorporates an innovative anti - electromagnetic technology
- Special ultra slip is added in the internal layer, ensuring the smooth insertion of cables
- Color marking indicating the power of the protected cables.
- The internal layer incorporates animal repellent
- High mechanical resistance in high temperature of 105°C
- Made from halogen free raw materials based on PP
- Low smoke emission during combustion



3 IMPORTANT POINTS



SPECIALLY DEVELOPED PACKAGING

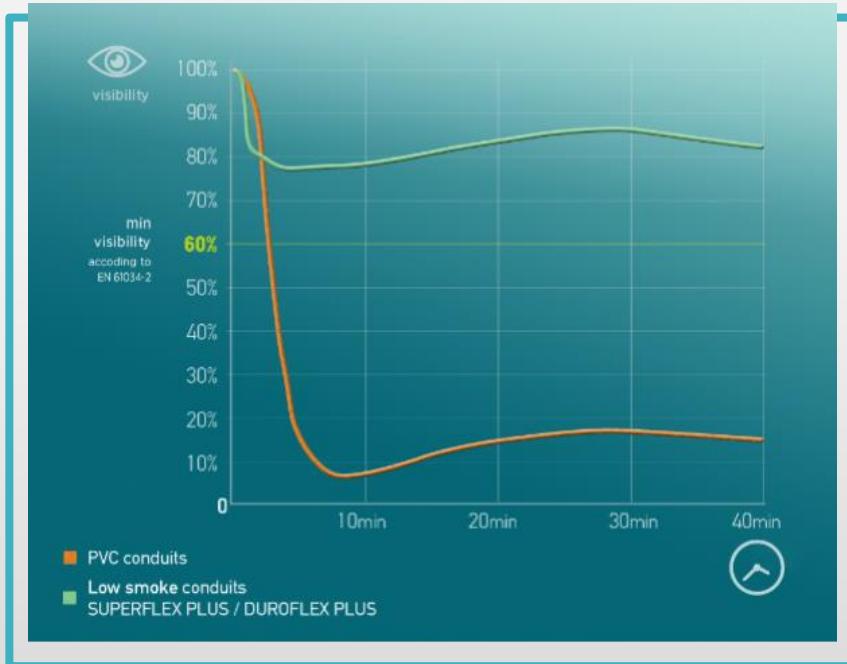


New packaging design

Specially developed, award-winning packaging that **reduces the volume from 25% to 50%** compared to the other conventional products.



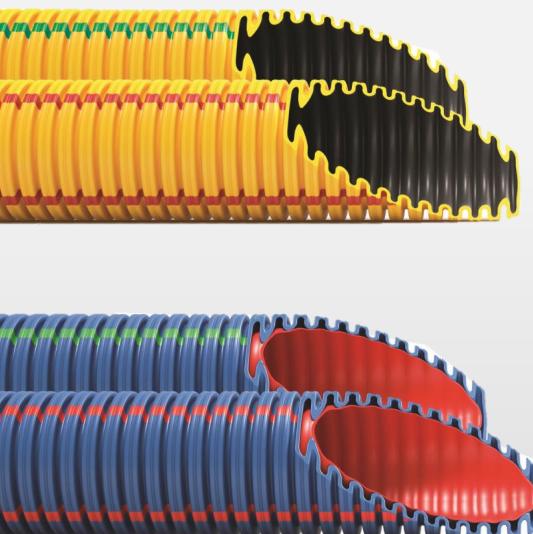
HALOGEN FREE & LOW SMOKE EMISSION



- Compliant with the fire protection regulation 364/2016/EE
- Certified by the German Testing and Certification Institute - VDE
- Production Standards:
 - EN 50642
 - EN 60754-2
 - EN 61034-2

COLOR MARKING

(NFP 98-332)



- Telecommunication cables
- Power cables

Indelible color marking follows the
NFP 98-332 standard for better
identification of the conduits' purpose
and contents, increasing safety

WHAT
IS NEXT?



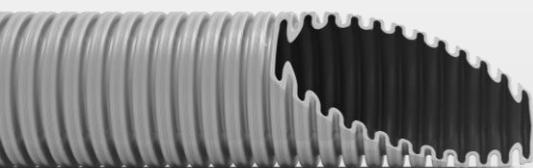
2.3

MEDIFLEX PLUS (750Nt)

NEW PRODUCT

Class: 33332

Ø16 – Ø32



- For concealed type installations
- Made from halogen-free raw materials
- Low smoke emission during combustion
- With anti-electromagnetic technology

COMING SOON...



PRODUCT SERIES

for cable management & protection



Plastic piping systems

Made from PVC

3.1

PLASTIC CONDUIT SYSTEMS MADE FROM PVC

4441

CONDUR – CONFLEX (1250Nt)

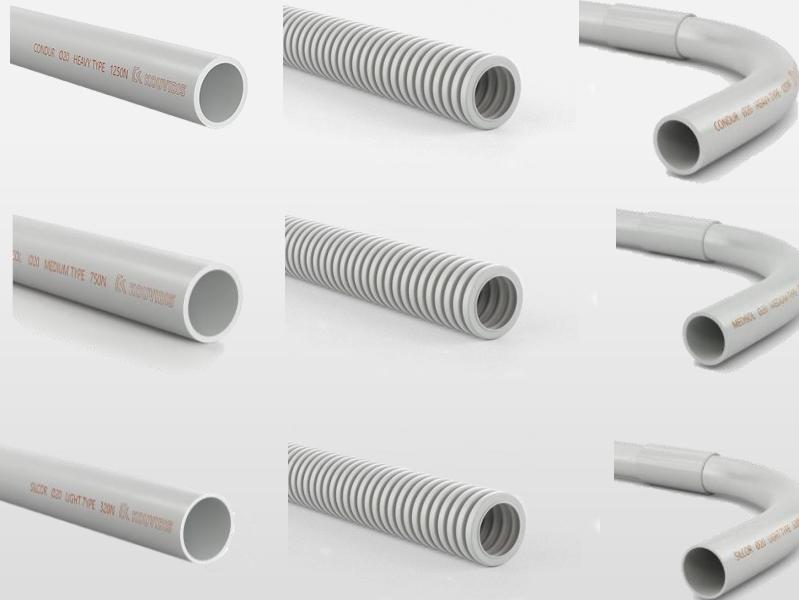
3341

MEDISOL – MEDI FLEX (750Nt)

2241

SILCOR – SIFLEX (320Nt)

Ø16 – Ø63



VDE marks Approval

PLASTIC CONDUIT SYSTEMS

ACCESORIES

Accessories



CONDUR
Coupler



CONDUR
Clip



CONDUR
Adaptor

Junction boxes



CONDUR junction
box with seals



CONDUR junction
box with grommets



CONDUR junction box
with no seals



Plastic piping systems

Made from halogen free raw materials

3.2

PLASTIC CONDUIT SYSTEMS HALOGEN FREE

Ø16 – Ø63

4441

CONDUR HF – CONFLEX HF (1250Nt)

VDE marks Approval



3341

MEDISOL HF – MEDIFLEX HF (750Nt)

Conduit impact strength



3.2

HALOGEN FREE SERIES ACCESSORIES

Accessories



CONDUR
Coupler



CONDUR
Clip



CONDUR
Adaptor

Junction boxes



CONDUR junction
box with seals



CONDUR junction
box with grommets



CONDUR junction box
with no seals

3.2

HALOGEN FREE SERIES ADVANTAGES



- In case of a fire accident, they don't release toxic and corrosive gases during combustion, protecting people and environment
- They provide higher protection of building facilities and mechanical equipment due to the absence of corrosive gases during their combustion
- The conduits ensure high impact resistance in extreme low temperature conditions (at -45°C)
- They contain flame retardants that reduce flame propagating



Plastic piping systems

With antimicrobial technology

3.3

PLASTIC CONDUIT SYSTEMS ANTIMICROBIAL TECHNOLOGY

Ø16 – Ø63

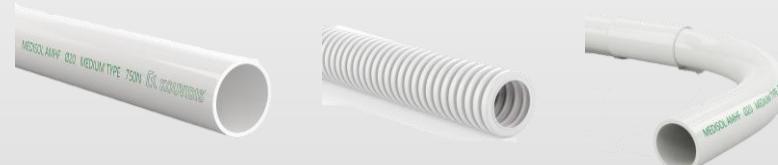
3341

MEDISOL AM – MEDIFLEX AM (750Nt)



3344

MEDISOL AMHF – MEDIFLEX AMHF (750Nt)



3.3

ANTIMICROBIAL SERIES ACCESSORIES

Accessories



MEDISOL AM
Coupler



MEDISOL AM
Clip



MEDISOL
AM Adaptor

Junction boxes



MEDISOL AM
junction box with
seals

3.3

ANTIMICROBIAL SERIES ADVANTAGES



- 99% of dangerous microorganisms eliminated within 24 hours - **ISO 22196** (Certified by the British laboratory BIOCOTE)
- Integrated technology that prevents the growth of microbes including mold and fungi
- Reduction of contamination (risk of pathogens transmission) due to cleaner surfaces
- The antimicrobial protection against microbial colonization ultimately extends product's lifetime
- Greater effectiveness against viruses due to the antimicrobial activity of the active ingredients that appear on product's surfaces



Plastic piping systems

for buried underground networks

3.4

TIMELINE

KOUVIDIS becomes the 1st purely Greek company that produces double structured wall conduits by launching the 1st generation of GEONFLEX conduits

2011

2014

2017

2019

GEOSUB conduit is launched, the “little brother” of GEONFLEX does more than 1.000.000m of sales

New accessories upgrades are introduced along with one more diameter (Ø32) and a 3rd production line.

3.4

PLASTIC CONDUIT SYSTEMS BURIED UNDERGROUND

Ø32 – Ø250

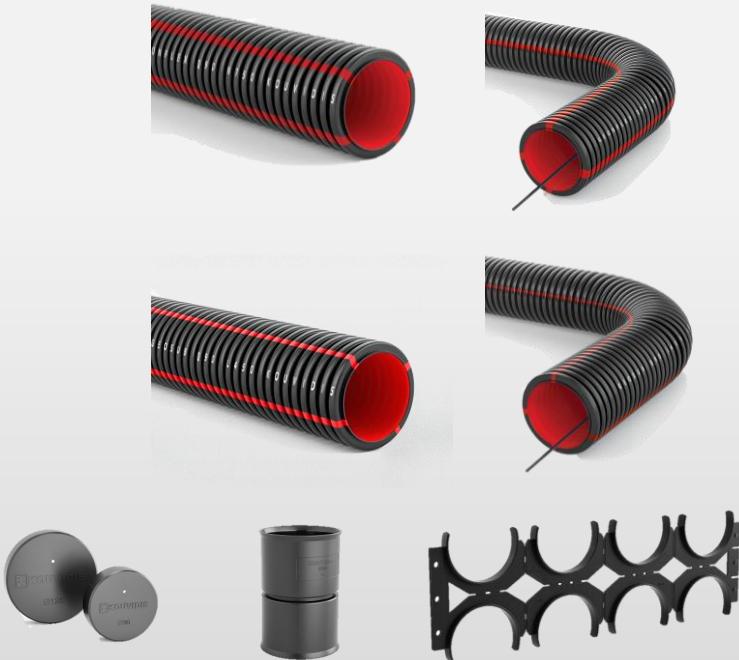
Normal type N750

GEONFLEX

Light type L450

GEOSUB

**ACCESSORIES &
INSTALLATION MATERIALS**



3.4

GEONFLEX & GEOSUB PROPERTIES



— Power cables

— Telecommunication
cables

- Wide range of diameters from $\varnothing 32$ to $\varnothing 250$
- Special **ultra slip** is added in the internal layer, ensuring the smooth insertion of cables (GEONFLEX)
- **Color marking** indicating the power of the protected cables.
- Not attractive to **rodents**
- Ensure **high ingress protection** (IP40/IP44 with KOUVIDIS connection couplers with hooks/ IP68 with KOUVIDIS adhesive & sealant)
- UV stabilized >5 years
- Cable guide with minimum tensile strength 650Nt

3.4

GEONFLEX & GEOSUB IDENTIFICATION



— GEONFLEX
— GEOSUB



HINT: The width of the longitudinal lines is used to easily identify the 2 products.

Longitudinal broad stripes of indelible color are used for GEONFLEX conduits while thin stripes of indelible color are used for GEOSUB conduits.

PRODUCT SERIES

for sewage & drainage

Perforated HDPE conduits

Foundation drainage & ground drainage solutions



GEODRAIN PLUS - NEW

4-layered perforated conduit for drainage

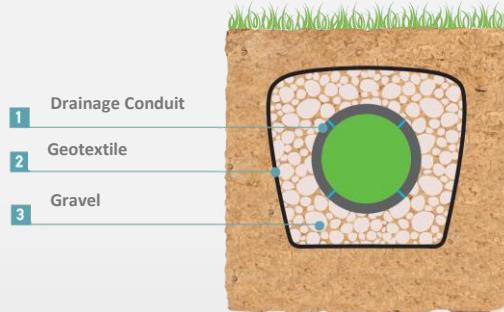
With pre-installed geotextile



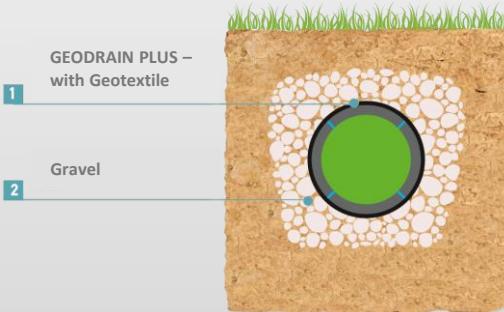
4.1

DRAINAGE LAYERS

THE USE OF GEOTEXTILE

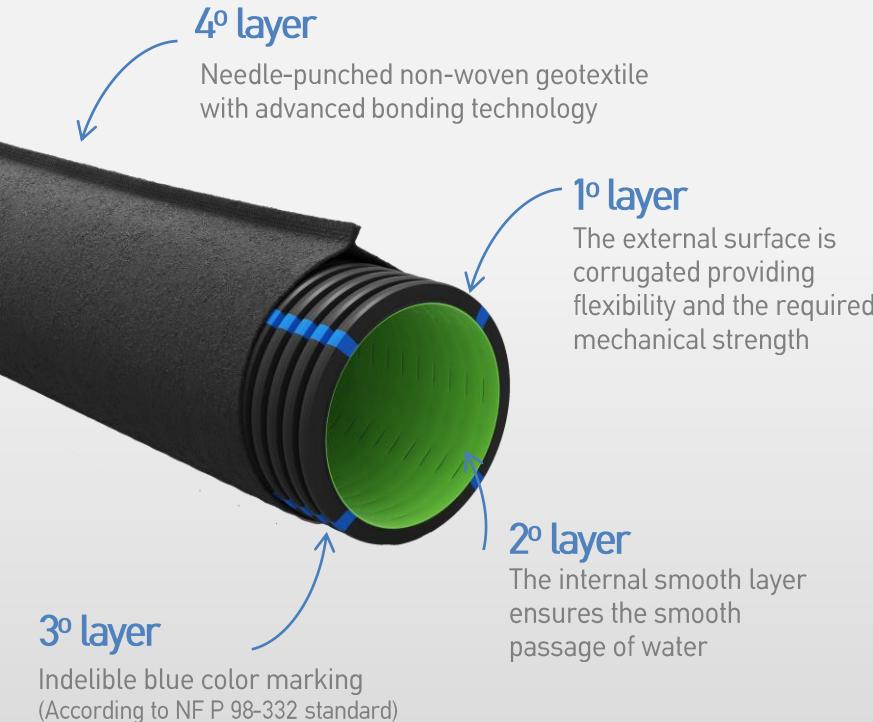


- **Up to 50% fewer man-hours for the installation of the Geotextile**
- **Up to 50% less meters of Geotextile, as it is pre-installed to the drainage conduit**



4,1

GEODRAIN PLUS



NEW GENERATION CONDUITS 4 LAYERED for drainage

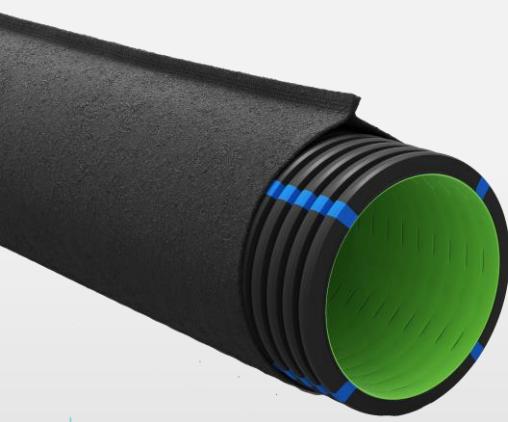
Welding of 3 different walls with the co-extrusion technology while using environmentally friendly raw materials

Use of specially developed geotextile **online** during the production process

4.1

GEODRAIN PLUS PROPERTIES

OD63 – OD200



220°

6m bars – local perforation 220°

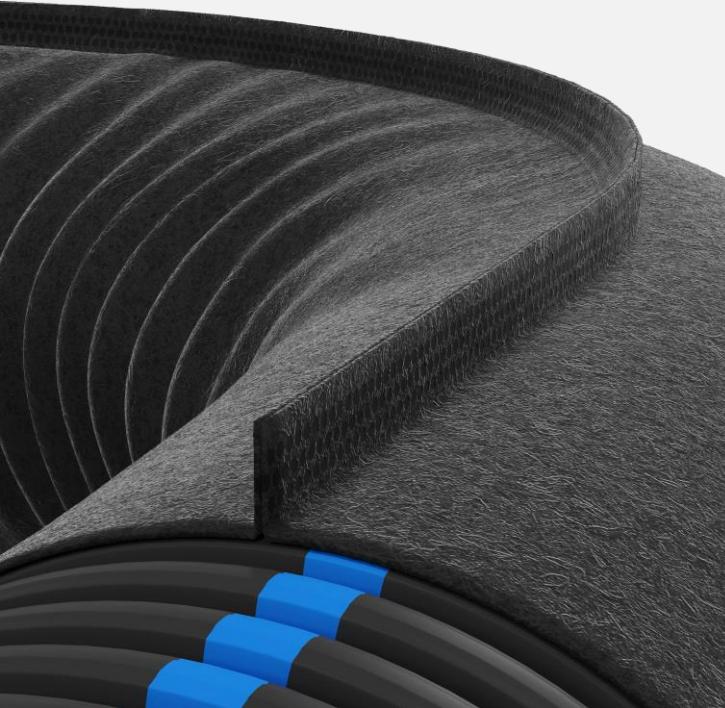
360°

Coils 50m/25m – total perforation 360°

- Made by specially stabilized HDPE raw material
- SN4 | SN8 Ring Stiffness according to EN ISO 9969
- Symmetrically perforated according to DIN 4262 standard
- UV resistance up to 5 years
- Chemical resistance according to DIN ISO 10358
- Halogen-free & heavy metals free (RoHS)

4.1

GEOTEXTILE PROPERTIES

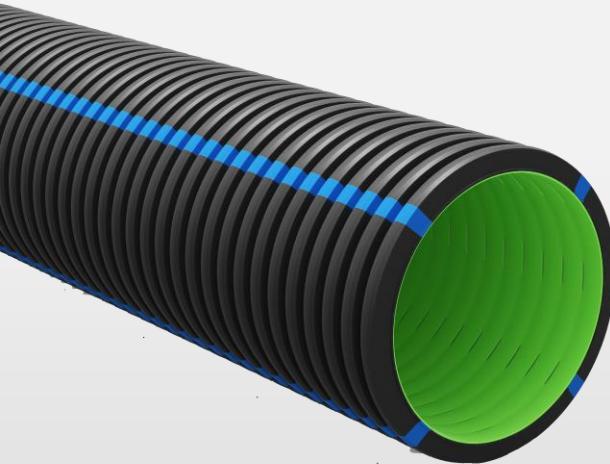


- 150gr/m² special Geotextile needle-punched & non-woven
- Advanced sealing technology for stable and even distribution of the geotextile
PATENT PROTECTED (No. 1008995)
- Developed to meet the needs for the majority of soils
- UV Resistance up to 5 years
- Accompanied by Declaration of Performance and bears the CE marking

4.1

GEODRAIN PROPERTIES

OD63 – OD200

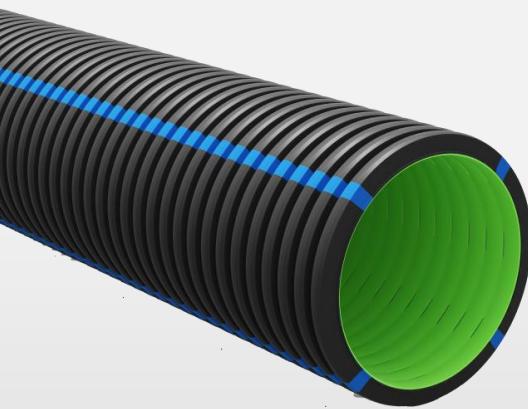


- Available also without the Geotextile
- There are some rare types of soil where the filter zones need to differ.
Soils with no coherence such as yellow calcareous mud or dispersed clays. Those soils are “internally unstable” and contain particles that may easily pass through the filter zones from gravel and geotextile.

4.1

GEODRAIN PROPERTIES

OD63 – OD200



220°

6m bars – local perforation 220°

360°

Coils 50m/25m – total perforation 360°

- SN4 | SN8 Ring Stiffness according to EN ISO 9969
- Perforation of 220°/360° perforation carried out by advanced machinery along its entire length
- It has corrosion resistance
- Exceptional resistance to solar radiation thanks to the aging stabilizers incorporated in the raw material of its outer wall
- Its engraved marking is a guide for the right laying of pipes on the trench
- Its much lower weight facilitates its loading, transport and storage

4.1

ACCESORIES & INSTALLATION MATERIALS

End Caps



Connection Coupler
with hooks



Adhesive & Sealant

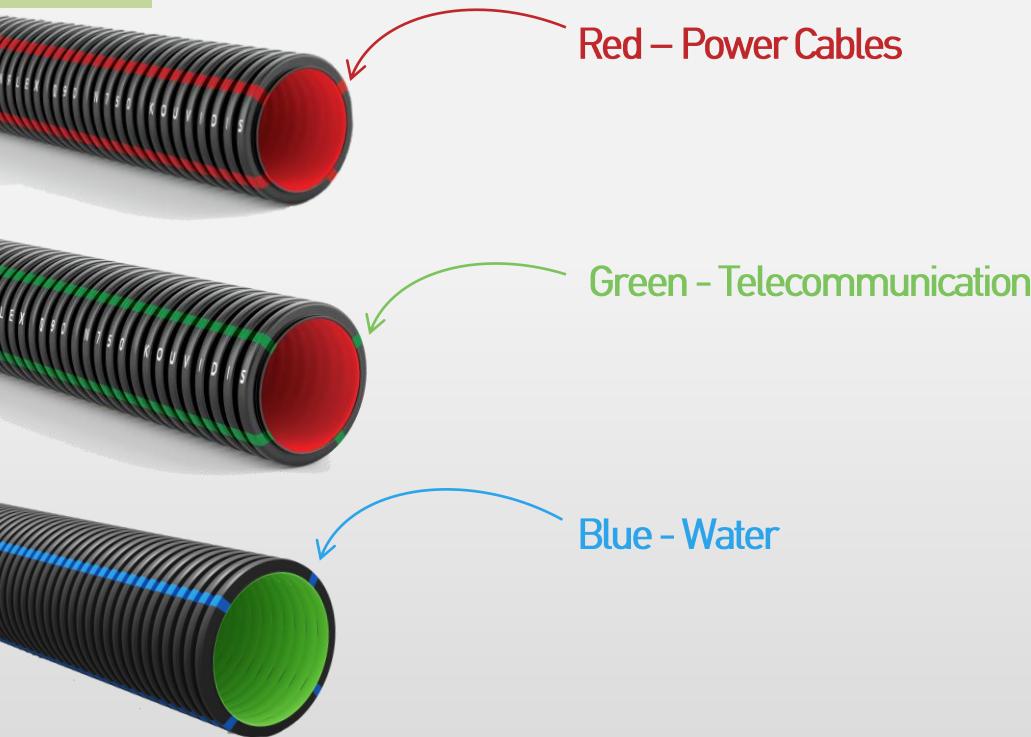


KEEP IN MIND



UNDERGROUND COLOR MARKING

(NFP 98-332)



Indelible color marking follows the **NFP 98-332** standard for better identification of the conduits' purpose and contents, increasing safety

4

COLOR MARKING PURPOSE



INCREASE SAFETY

At a construction or reconstruction of any given structure, employees on the construction site can easily identify what is inside the conduits by facing the exterior color marking.

Double wall HDPE conduits

Waste water sewage and stormwater drainage solutions

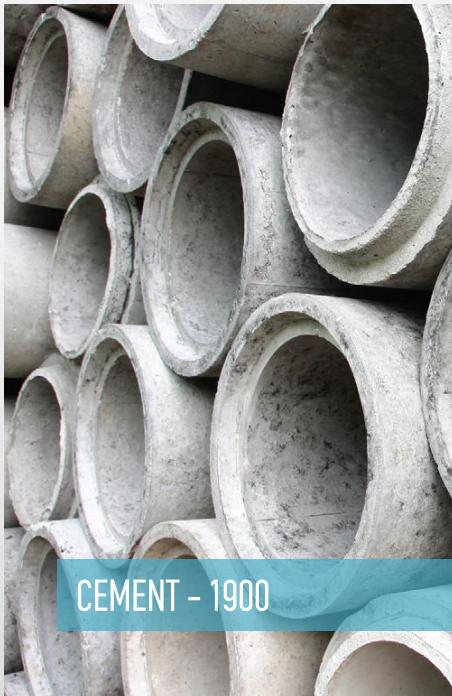


4.2

SEWAGE SYSTEMS MATERIALS EVOLUTION



CLAY – ANCIENT TIMES



CEMENT – 1900



PVC – 1930



HDPE – TODAY

4.2

GEOSAN PROPERTIES

OD160 – OD630

- Made of **High-Density Polypropylene (HDPE)**
- Certified according to **EN 13476-3** by Bureau Veritas
- **SN4 ISN8** Ring Stiffness according to EN ISO 9969
- **Ring flexibility RF30** according to EN ISO 13968
- **Exceptional impact strength** according to EN 744 (TIR≤10%)

BUREAU
VERITAS

4.2

GEOSAN PROPERTIES

OD160 – OD630



- Exceptional **resistance to solar radiation** thanks to the aging stabilizers incorporated in the raw material of its outer wall
- **Excellent abrasion behavior** thus preventing the depositing of dirty materials (fat, salts, etc.) in their smooth internal wall
- Its **much lower weight** facilitates its loading, transport and storage
- The special sealing elastomeric rings, in combination with the geometry of the external wall of GEOSAN pipes, fulfill EN 1277 by ensuring **permanent leak-tightness**



4.2

GEOSAN CONNECTION METHODS



With the use of an integrated molded socket



With the use of a separate coupler

4.2

GEOSAN ACCESORIES



CONNECTION
COUPLER



REPAIR COUPLER



BRANCH 45°



LATERAL CONNECTOR
(SADDLE)



BENDS 45°



BENDS 90°



BRANCH 45°



TEE BRANCH 90°

4.2

GEOSAN ACCESORIES



MALE END CAPS



FEMALE END CAPS



ELASTOMERIC SEALING
RING



ELASTOMERIC SEALING
RING FOR FEMALE END



DRILLING CROWN



ADHESIVE & SEALANT



LUBRICANT

4.2

INSTALLATION COMPONENTS

CONNECTION LUBRICANT



NECESSARY FOR THE SAFE AND FAST CONNECTION OF PLASTIC CONDUITS WITH ELASTOMERIC SEALING RINGS ACCESSORIES IN SEWAGE OR DRAINAGE.



- Water Resistance
- In paste form
- When used in the right quantities just before installation, it does not alter the shape of the elastomeric sealing ring, protecting from potential leakage.

4.2

GEOSAN CONDUITS ADVANTAGES



- They are **50% lighter** than the conduits made from PVC while they are weighting only **5%** of the cement conduits
- They succeed a **40% material cost reduction** compared to PVC or Cement
- They can **last longer** due to their flexibility and their ability to return to their initial form
- They are **100% environmentally friendly** as they are **Halogen Free**, **fully recyclable** with a very low environmental footprint



FOREVER SAFE

FOLLOW US

