

Advanced plastic piping systems

EN

2024

 **KOUVIDIS**


**MULTI
LAYER** PIPES
KOUVIDIS

**Committed
to keep you
in the lead**

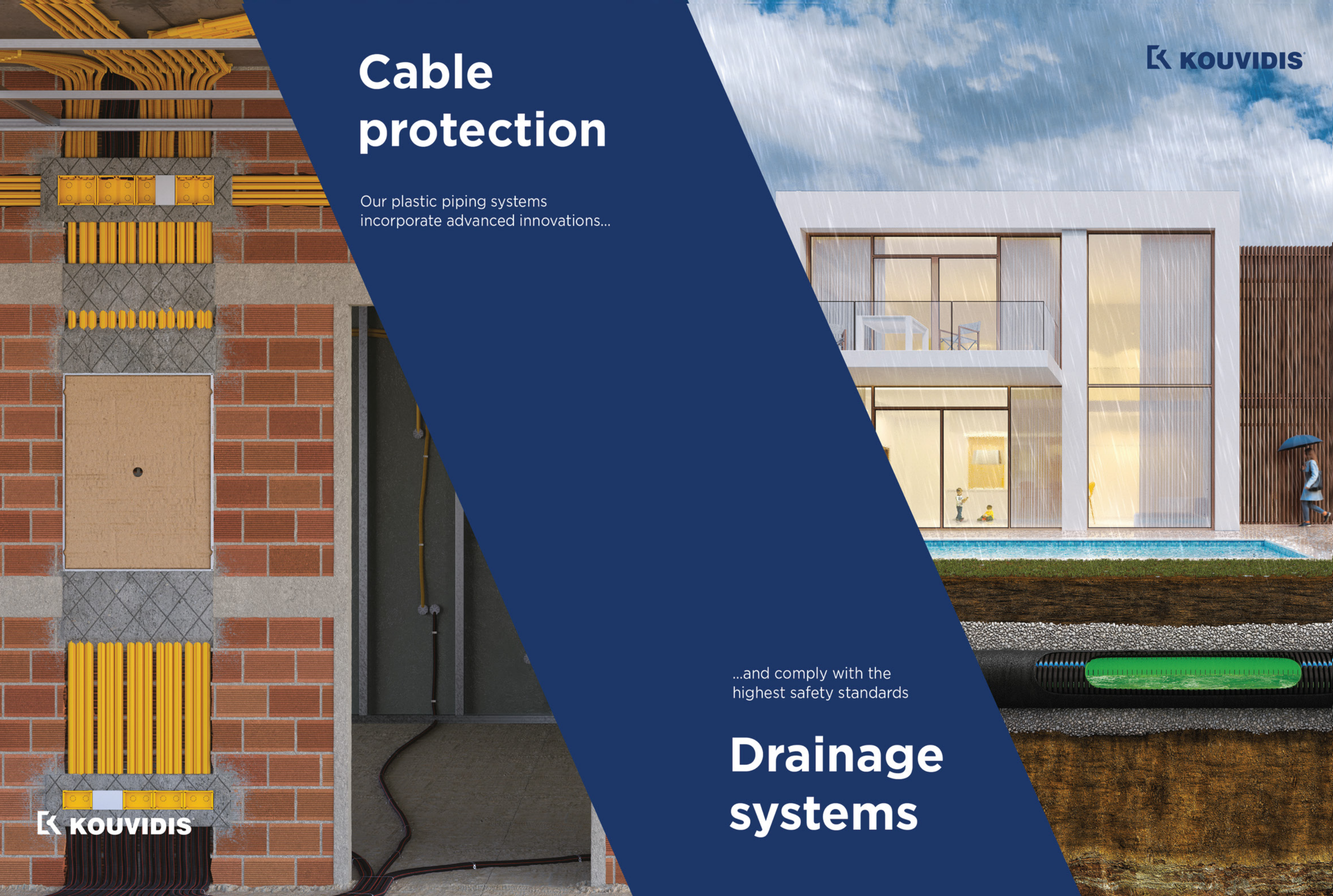


Cable protection

Our plastic piping systems incorporate advanced innovations...

...and comply with the highest safety standards

Drainage systems



WE ARE A PASSIONATE, SECOND-GENERATION, FAMILY-OWNED ENTERPRISE, THE LARGEST PLASTIC PIPE MANUFACTURER IN GREECE, SPECIALIZED IN THE DEVELOPMENT AND PRODUCTION OF INNOVATIVE PLASTIC PIPING SYSTEMS FOR CABLE MANAGEMENT AND PROTECTION, DRAINAGE AND SEWAGE.

Our business philosophy is to ensure:

safety to the installers

confidence to the engineers

trust to our partners and

respect to our employees and our society



In this regard we are constantly seeking for new innovations, exploring modern plastics, and manufacturing the best sustainable solutions for our customers.

discover
our 45 years
know how...



CABLE PROTECTION

DRAINAGE SYSTEMS

| | Heavy type | | | | Medium type | | | | | | | | Light type | | | | Underground network | | | | DRAINAGE SYSTEMS | | | | | | |
|---------------------------------|-----------------------|----------|------------|-------------|-----------------------|----------------|---------------|----------------|-------------|--------------|----------|-----------|-----------------------|-----------------|----------|----------|---------------------|---------------|------------|-------------|------------------|------------|--------------------|----------------|--------------------------------------|----------------|-----|
| | CONDUR® | CONFLEX® | CONDUR® HF | CONFLEX® HF | DUROSOL® PLUS | DUROFLEX® PLUS | MEDISOL® PLUS | MEDIFLEX® PLUS | MEDISOL® AM | MEDIFLEX® AM | MEDISOL® | MEDIFLEX® | SUPER SOL® PLUS | SUPERFLEX® PLUS | SILCOR® | SIFLEX® | GEONFLEX® | GEONFLEX® bar | GEOSUB® | GEOSUB® bar | GEODRAIN® bar | GEODRAIN® | GEODRAIN® PLUS bar | GEODRAIN® PLUS | GEOSAN® (does not follow EN 13475-3) | HYDROFLEX® | |
| CLASSIFICATION | 44411 | 44412 | 44441 | 44442 | 33431 | 33332 | 33431 | 33332 | 33411 | 33412 | 33411 | 33412 | 23431 | 23332 | 23411 | 22412 | N750 | N750 | N450 | N450 | SN4/SN8 | SN4 | SN4/SN8 | SN4 | SN4/SN8 | - | |
| TECHNOLOGIES | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Halogen free | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Low smoke | - | - | - | - | - | ✓ | - | ✓ | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | ✓ | |
| Low acidity | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | |
| Antimicrobial | - | - | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Anti - electromagnetic | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | - | - | - | - | |
| Low friction | - | - | - | - | ✓ | ✓ | ✓ | ✓ | - | - | - | - | ✓ | ✓ | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | |
| UV Stability | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Anti-Rodent | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | - | - | |
| Internal guide | - | - | - | - | - | ✓ | - | ✓ | - | - | - | - | - | - | - | - | ✓ | - | ✓ | - | - | - | - | - | - | - | |
| Color marking | - | - | - | - | ✓ | ✓ | - | - | - | - | - | - | ✓ | ✓ | - | - | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | - | - | - | |
| SPECIFICATIONS | Material | U-PVC | U-PVC | PC | PC | PO Blend | PO Blend | PO Blend | PO Blend | U-PVC | U-PVC | U-PVC | U-PVC | PO Blend | PO Blend | U-PVC | U-PVC | HDPE | HDPE | HDPE | HDPE | HDPE | HDPE | HDPE | HDPE | HDPE | |
| Compression strength | >1250Nt | >1250Nt | >1250Nt | >1250Nt | >750Nt | >750Nt | >750Nt | >750Nt | >750Nt | >750Nt | >750Nt | >750Nt | >320Nt | >320Nt | >320Nt | >320Nt | Type 750 | Type 750 | Type 450 | Type 450 | SN4/SN8 | SN4 | SN4/SN8 | SN4 | SN4/SN8.RF30 | >160Nt | |
| Impact strength | 6J | 6J | 6J | 6J | 2J | 2J | 2J | 2J | 2J | 2J | 2J | 2J | 2J | 2J | 2J | 1J | Normal | Normal | Normal | Normal | - | - | - | - | TIR≤10% | 2J | |
| Minimum temperature (°C) | -25 | -25 | -25 | -25 | -25 | -15 | -25 | -15 | -25 | -25 | -25 | -25 | -25 | -15 | -25 | -25 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -5 | -25 | |
| Max temperature (°C) | 60 | 60 | 120 | 120 | 105 | 105 | 105 | 105 | 60 | 60 | 60 | 60 | 105 | 105 | 60 | 60 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 105 | | |
| Resistance to flame propagation | Non flame propagating | | | | Non flame propagating | | | | | | | | Non flame propagating | | | | Flame propagating | | | | Not declared | | | | | | |
| Ingress Protection | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | min IP65 | IP44/IP68* | IP44/IP68* | IP40/IP68* | IP40/IP68* | - | - | - | - | min IP65 | |
| Resistance to bending | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | Rigid | Pliable | |
| Diameters | Ø16-Ø63 | Ø16-Ø63 | Ø16-Ø40 | Ø16-Ø40 | Ø16-Ø32 | Ø16-Ø32 | Ø16-Ø32 | Ø16-Ø32 | Ø16-Ø63 | Ø16-Ø63 | Ø16-Ø63 | Ø16-Ø63 | Ø16-Ø32 | Ø16-Ø32 | Ø16-Ø32 | Ø16-Ø40 | Ø32-Ø200 | Ø75-Ø250 | Ø32-Ø200 | Ø75-Ø250 | ØD110-ØD200 | ØD63-ØD200 | ØD110-ØD200 | ØD63-ØD200 | ØD160-ØD630 | Ø23-Ø29 | |
| Certifications | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-BIIOCOTE | CE-BIIOCOTE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | CE-VDE | BUREAU VERITAS | VDE |
| INSTALLATION FIELDS | Exposed | ○ | ○ | ● | ● | ● | ● | ● | ○ | ○ | ○ | ○ | - | - | ○ | ○ | - | - | - | - | - | - | - | - | - | - | |
| Concealed (dry walls) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ○ | ○ | - | - | - | - | - | - | - | - | - | - | |
| Concealed (underplaster) | ○ | ○ | - | - | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ○ | ○ | - | - | - | - | - | - | - | - | - | - | |
| Concealed (floor, ceilings) | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ● | ● | ○ | ○ | - | - | - | - | - | - | - | - | - | - | |
| Underfloor in screed | ○ | ○ | - | - | ● | ● | ● | ● | ○ | ○ | ○ | ○ | - | - | - | - | ● | ● | ○ | ○ | - | - | - | - | - | - | |
| Concrete | ● | ● | - | - | ● | ● | ● | ● | ○ | ○ | ○ | ○ | - | - | - | - | ● | ● | ○ | ○ | - | - | - | - | - | - | |
| Outdoor | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Buried underground | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - | - | - | - | ● | ● | ● | ● | - | - | - | - | - | - | |
| Wood | ● | ● | ○ | ○ | ● | ● | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - | - | - | |
| Discharge stormwater | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Wastewater disposal | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Agricultural drainage | ○ | ○ | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Building drainage | ○ | ○ | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Drain Roads/fields | ○ | ○ | ● | ● | ○ | ○ | ○ | ○ | ○ | ○ | ○ | ○ | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Protection of water pipes | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | ● | |

TECHNOLOGIES EXPLANATION
Halogen free conduits acc. to EN 50642
Low smoke density of conduits burning acc. to EN 61034-2
Low acidity of gas content during combustion acc. to EN 60754-2
Antimicrobial protection on plastics acc. to ISO 22196
UV stability after testing in real and artificial acc. to EN ISO 4892-2) weathering conditions
Anti-electromagnetic technology which absorbs part of the electromagnetic radiation emitted by the cables
Low friction in the internal layer of the conduit acc. to IEC/TR 62470
Anti-rodent technology which repels rodents (European Patent EP2698792)
Internal guide for cable routing with minimum tensile strength 650Nt
Color marking with longitudinal stripes, of indelible color, for identification between power and telecommunication cables

SPECIFICATIONS EXPLANATION
CLASSIFICATION for cable protection conduit systems is according to EN 61386.01 and EN 61386.24 and for drainage piping systems is according to EN ISO 9969
Materials are specially stabilized heavy metals free (RoHS) thermoplastics
Compression strength for cable protection conduit systems refers to resistance to compression (EN 61386.01) and for drainage piping systems refers to ring stiffness (EN ISO 9969) and ring flexibility (EN ISO 13968 for GEOSAN pipes)
Impact strength for cable protection conduit systems refers to resistance to impact (EN 61386.01) and for GEOSAN pipes refers to impact strength (EN 744)
Ingress protection for cable protection conduit systems refers to protection against solid objects and water (EN 60529) and for GEOSAN pipes refers to permanent leak tightness (EN 1277)
Diameters refer to pipe's outside diameters
*IP68 when the pipe is bonded to its coupler with the use of KOUVIDIS sealant

ADDITIONAL INFORMATION
All products are manufactured from special stabilized thermoplastic materials, heavy metals free acc. to RoHS (2011/65/E, 2015/863/EU) and Reach (EC /1907/2006 European Directives). All conduit systems for cable protection comply with the essential safety requirements of the EC Low Voltage European Directive 2014/35/EU.
KOUVIDIS is committed to sustainable development through the implementation of three MS acc. to ISO 9001, ISO 14001 and ISO 45001, the reduction of its emitted pollutants and waste packaging, the rational use of water and energy (RES) and the use of high quality materials with the lowest environmental footprint.
Contact our Technical Support department to learn more details about our products (+30 2810 831 500).

○ Recommended - Not recommended ● Best choice acc. to the manufacturer

The above Installation fields are only recommendations due to the technical specifications of KOUVIDIS products. National or local restrictions and prohibitions must always be considered.



OUR HEADQUARTERS Heraklion, Crete

With 45 years of successful presence, KOUVIDIS is one of the top manufacturers of plastic piping systems for cable protection, sewage, and drainage in Europe.

The trust that we have cultivated with our customers through all these years are the main source of inspiration for the development of new products and innovative solutions that secure high quality and safety to the installer.

We are delighted to have fulfilled a multi annual investment plan for the construction of our new Smart Factory and the installation of our state-of-the-art production lines adopting the values of the 4th industrial revolution. Thus, we now look into the future with confidence and we commit to keep creating value for our staff, our customers, and our partners, whilst to contribute to the development of our society.



KOUVIDIS
SMART FACTORY

KOUVIDIS

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