



ISO 9001

BUREAU VERITAS
Certification

IND 18.6002



HAYKALPLAST S.A.L.

PLASTICS SOLUTIONS

PVC Pipes: Products Catalog
2018



Company Profile

Haykal Plast s.a.l has been a leading manufacturer of PVC & PE pipes and fittings.

Haykal Plast was founded in 1993, and the factory is now located in Zouk Mosbeh.

Production capacity of the unplasticised Polyvinyl Chloride (uPVC) Pipe Plant is 8,000 Tons per year, and 4,000 Tons of HDPE 100 per year.

ISO 9001

BUREAU VERITAS
Certification



IND 18.6002

Standards	Application
EN 1329	Soil and Water Pipes
DIN 19531	Soil and Water Pipes
EN 1401	Underground and Sewer Pipes
DIN 19534	Underground and Sewer Pipes
NFT 54-018	Telecommunication Pipes
EN 1452	Pressure Pipes

Overview

Haykal Plast provides customers with a number of solutions to all requirements that may arise in the commercial and private drainage sector.



Benefits

Low weight

Abrasion resistance

Good hydraulic properties

High impact/tensile strength

Chemical resistivity: uPVC pipes are resistant to damage from alkalis and acids alike

Environmental: PVC uses less renewable resources and is extensively recyclable

Smoothness: the smooth inner surface of uPVC pipes allows a significantly greater flow compared to other non-PVC alternatives (low friction coefficient)

Electrical resistivity: uPVC pipes are non-conductive, and thus are not affected by electro-chemical corrosion

Flame resistance: uPVC pipes have a high kindling point; they do not burn without an external ignition source (exceeding 450° Celsius) and are self-extinguishing

Dimensions range from 50mm to 400mm for waste and sewage applications as well as for electrical and telecommunication systems

MIA PLAST *R-PIPE-UD* /400 X 9.8MM X 6M/ NORM EN1401-1 SN4 kN/m2

Use & Application

Haykal Plast uPVC pipes are manufactured to suit various applications:

Cable ducts for electrical and telecommunication cables

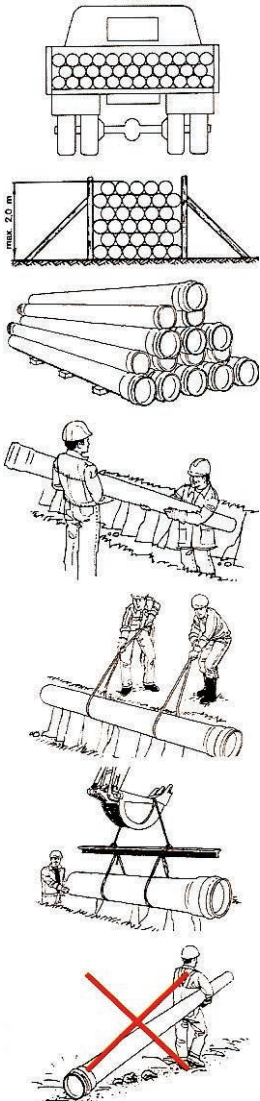
Ventilation and building soil waste elimination within the building

Underground drainage and sewer networks

Potable Water distribution and pressurised systems



Storage & Transportation



Pipes are stacked on a flat and level surface

Surface is free from any sharp objects that may result in irreparable damage or deformation

Loose pipes are stored on a stable platform

Loading pipes on the vehicle is done with great care to avoid impact damage

Off-loading pipes is done by rolling them gently over timber assuring no damage is done to the pipe

DO NOT DRAG PIPES ACROSS THE GROUND AND AVOID SHARP EDGES

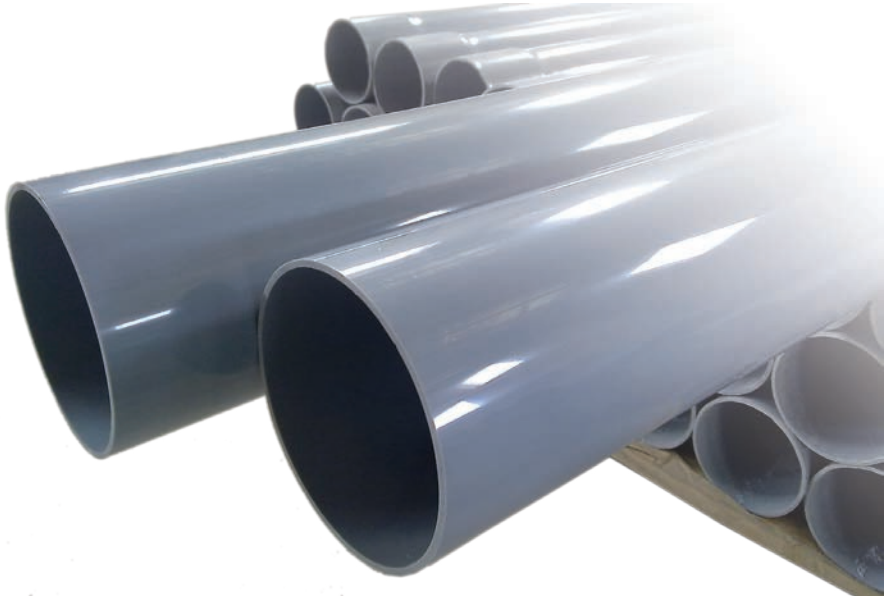


uPVC Soil & Waste Pipes

(EN 1329 - DIN 19531)

Usage

Haykal Plast uPVC soil and waste pipes are manufactured in accordance with EN 1329 and DIN 19531 standards, ranging in diameter from 50mm to 200mm. Suitable for soil, waste and vent applications.



Socket Type

Haykal Plast uPVC soil and waste pipes range are fitted with a Solvent Cement (S.C.) socket.

EN 1329

OD	S	Socket Type
50	3.0	S.C
63	3.0	S.C
75	3.0	S.C
100	3.0	S.C
110	3.2	S.C
125	3.2	S.C
160	4.0	S.C
200	4.9	S.C



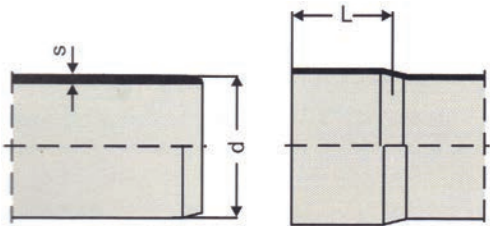
dimensions are in mm

DIN 19531

OD	S	Socket Type
50	1.8	S.C
75	1.8	S.C
110	2.2	S.C
125	2.5	S.C
160	3.2	S.C



dimensions are in mm



*All pipes are supplied in 6-meter lengths of a Grey color.
For non-standard lengths and thicknesses, please contact Haykal Plast.*

uPVC Underground & Sewer Pipes

(EN 1401 - DIN 19534)

Usage

Haykal Plast uPVC Underground and Sewer pipes are manufactured in accordance with EN 1401 and DIN 19534 standards, ranging in diameter from 110mm to 630mm, suitable for underground drainage and sewer networks.



Socket Type

Haykal Plast uPVC underground and sewer pipes range are fitted with a Push-Fit (R.R.) socket.

EN 1401

OD	SN2 SDR 51	SN4 SDR 41	SN8 SDR 34	Socket Type
110	2.7	3.2	3.2	R.R
125	2.7	3.2	3.7	R.R
160	3.6	4.0	4.7	R.R
200	4.0	4.9	5.9	R.R
250	4.9	6.2	7.3	R.R
315	6.2	7.7	9.2	R.R
400	7.7	9.8	11.7	R.R
500*	9.8	12.3	14.6	R.R
630*	12.3	15.4	18.4	R.R

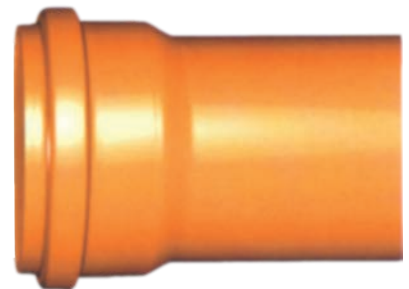
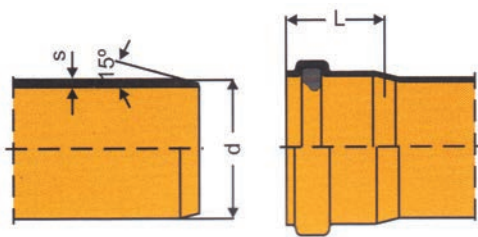
dimensions are in mm



DIN 19534

OD	S	Socket Type
110	3.0	R.R
125	3.0	R.R
160	3.6	R.R
200	4.5	R.R
250	6.1	R.R
315	7.7	R.R
400	9.8	R.R
500	12.3	R.R
630	15.4	R.R

dimensions are in mm



*All pipes are supplied in 6-meter lengths of Orange-Brown color.
For non-standard lengths and thicknesses, please contact Haykal Plast.*

Usage

Haykal Plast uPVC Telecommunication Pipes are manufactured in accordance with NFT 54-018 standards, with a diameter of 50 mm and 100mm, suitable for ducting telecommunication lines, especially for fiber optic installations. Haykal Plast also manufactures cable ducts for direct burial with a range from 50 mm up to 200 mm.

Socket Type

Haykal Plast uPVC Telecommunication pipes are fitted with a Solvent Cement (S.C.) socket.



NFT 54-018

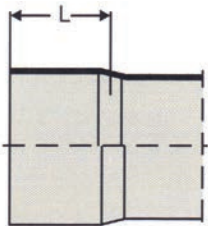
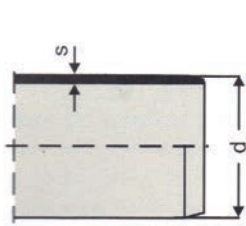
OD	S	Socket Type
50	2.0	S.C
100	2.0	S.C

dimensions are in mm

CABLE DUCTS

OD	MB (SN4)	DB (SN8)	Socket Type
50		1.8	S.C
75		2.3	S.C
100	2.5	3.0	S.C
110		3.2	S.C
160	4.0	4.7	S.C
200	4.9	5.9	S.C

dimensions are in mm



All pipes are supplied in 6-meter lengths of a Grey color.
For non-standard lengths, thicknesses and colors, please contact Haykal Plast.

uPVC Pressure Pipes

(EN 1452)

Usage

Haykal Plast uPVC pressure pipes are manufactured in accordance with EN 1452 standard, ranging in diameter from 20mm to 400mm, suitable for pressurised systems and potable water.



Socket Type

Haykal Plast uPVC pressure pipes range are fitted with a Solvent Cement (SC.) or Push-Fit pressure rubber ring (R.R) sockets.

EN 1452

working pressure in bars at 20° C.

OD	PN6	PN10	PN16	PN20
20				2.0*
25				2.5*
32			2.4	3.0
40			3.0	3.7
50	1.8	2.4	3.7	4.6
63	1.9	3.0	4.7	5.8
75	2.2	3.6	5.5	6.8
90	2.7	4.3	6.6	8.2
110	2.7	4.2	6.6	8.1
125	3.1	4.8	7.4	9.2
160	4.0	6.2	8.3	11.8
200	4.9	7.7	9.5	14.7
250	6.2	9.6	11.9	18.4
315	7.7	12.1	14.8	
400	9.8	15.3		

* Plain Ends

All pipes are supplied in 6-meter lengths of a Dark Grey color.

For non-standard lengths, thicknesses and colors, please contact Haykal Plast.

Joining Procedures



Clean pipe and fitting ends from dust and any burrs to ensure a clean surface for bonding.

Insert the pipe or fitting into the joint and mark with a line the point of farthest travel.

Apply solvent cement to both ends.

Re-insert pipe or fitting ensuring that the marked line coincides with the edge of the pipe and leave to dry.

Clean pipe and fitting ends from dust and any burrs. If necessary, chamfer the edge of the pipe to ease insertion.

Insert the pipe or fitting into the joint and mark with a line the point of farthest travel.

Insert O-ring into pipe or fitting making sure it is well seated in the joint.

Push the ends of the pipe (or fitting) together applying enough pressure to complete the seal.



PVC Fittings

SN 8/CR 8/SDR 34
SN 4/CR 4/SDR 41



DN/OD 110 – 500

Underground Pipes and Fittings:
The Funke complete System

Tuyaux et raccords assainissement :
Le système complet Funke

Rohre und Formteile:
Das Komplettsystem von Funke

COEX 2000®



Haykal Plast O-ring pipes have a perfect match in the underground drainage fittings by Funke Gruppe (Germany). The use of Funke fittings along with Haykal Plast products ensures a perfect and reliable seal everytime.



MIA Plast solvent cement fittings are designed around Haykal Plast pipes ensuring the highest quality, best match for the pipes and reliability throughout the service life of the system.





EXAMINATION REPORT

Determination of the Vicat softening temperature



EXAMINATION REPORT

Determination of the Vicat softening temperature



EXAMINATION REPORT

Determination of resistance to external blows at 0°C (round-the-clock method)

Unplasticized PVC pipes for inner- and outer sewer systems



EXAMINATION REPORT

Determination of resistance to external blows at 0°C (round-the-clock method)

Unplasticized PVC pipes for inner- and outer sewer systems

REP
LC 15
AUTI
H. Pat
DEP
Lab C



EXAMINATION REPORT

Determination of resistance against heating at 150°C

Unplasticized PVC-U pipes for inner- and outer sewer systems

REPORT NUMBER
43-1
AUTHORISATION
Co-ordinator Lab C
DEPARTMENT

Kiwa Nederland B.V.
Lab C
Willemsoord 50
NL 7327 AC Apeldoorn
Netherlands
Telephone +31 (0) 888 988
Internet www.kiwa.com

Kiwa Nederland B.V.
Lab C
Willemsoord 50
NL 7327 AC Apeldoorn
Netherlands
Telephone +31 (0) 888 988 330
Internet www.kiwa.com



KOMO® Product certificate K98427/01

Issued 2018-04-15 Replaces
Valid until Indefinite Dated
Page 1 of 3

Pipes for non-pressure sewerage – PVC-U
Haykal Plast S.A.L.

STATEMENT BY KIWA

This product certificate is issued on the basis of BRL 52200 "Plastic piping systems for non-pressure underground drainage and sewerage – PVC-U" dated 10 January 2017, in accordance with the Kiwa-Regulations for Certification.

The quality management system and product characteristics in association with pipes for non-pressure sewerage are assessed periodically.

On this basis Kiwa declares that a justified confidence exists, that the pipes for non-pressure sewerage delivered by the certificate holder at delivery fulfil:

- the technical specification laid down in this product certificate;
 - the product requirements as laid down in this product certificate and in the BRL
- provided that the pipes for non-pressure sewerage have been marked with the KOMO®-mark in a manner as indicated in this product certificate.

Luc Leroy
Kiwa

The certificate is listed in the overview on the website of Stichting KOMO: www.komo.nl.
Advice: consult www.kiwa.nl in order to ensure that this certificate is still valid.



REPORT NUMBER
JC 15244-1

AUTHORISATION
f. Paure, Co-ordinator Lab C

DEPARTMENT
JC C

This report may only be duplicated as a complete set, without any modifications and without the permission of the legitimate owner.
The test results in this report are exclusively related to the samples offered and tested.
With regard to measurement uncertainty information please check our website.
In case of dispute regarding this test report please contact Kiwa Nederland B.V.



Certificate of Co-Operation

between

Funke Kunststoffe GmbH (Germany)

and

Haykal Plast S.A.R.L. (Lebanon)

The co-operation and license agreement includes the areas

Know-How and Quality Excellence

for the extrusion of

High Quality Plastic Pipes for Non-pressure Underground Drainage and Sewerage –
Unplasticized Poly(vinyl chloride) (PVC-U) to EN 1401-1 2009

License Brand: „FUNKE L“ Underground Drainage

FUNKE Kunststoffe GmbH



17.11.2017

Norbert Funke
(Managing Director)



Kiwa Nederland B.V.
De Wierden Chardruiven 273
Postbus 70
2280 AB Rijswijk
The Netherlands
Tel. +31 88 988 44 00
Fax +31 88 988 44 20
info@kiwa.nl
www.kiwa.nl

Holder of Certificate
Haykal Plast S.A.L.
Industrial Zone
P.O. Box 70308
ZOUK MOSBEH
Lebanon
Tel. +961 9210133
Fax +961 9210137
haykalplast@haykalplast.com
www.haykalplast.com

Evaluated in:
quality system
product
Periodic inspection



HAYKAL PLAST S.A.L.

ZOUK MOSBEH, INDUSTRIAL ZONE- LEBANON

Bureau Veritas Certification Holding SAS – UK Branch certifies that the Management System of the above organisation has been audited and found to be in accordance with the requirements of the management system standards detailed below

ISO 9001:2015

Scope of certification

PRODUCTION AND SALES OF PVC & HDPE PLASTIC PIPES

Original cycle start date: 05-January-2009

Expiry date of previous cycle: 04-January-2018

Recertification Audit date: 12-December-2017

Recertification cycle start date: 02-January-2018

Subject to the continued satisfactory operation of the organization's Management System, this certificate expires on: 04-January-2021

Certificate No. IND 18.6002

Version: No. 1 Revision date: 02-January-2018

Certification body address: 8th Floor, 66 Prescott Street, London E1 6HQ, United Kingdom
Local office: Bureau Veritas Liban SAS – Dedeyan Center 9th Floor – Dora - Lebanon



0006

Further clarifications regarding the scope of this certificate and the applicability of the management system requirements may be obtained by consulting the organization.
To check this certificate validity please call: 961 1 240540 / 640



HAYKALPLAST S.A.L

PLASTICS SOLUTIONS

scan the QR code with your mobile to locate us on the map!

>>



Contact Info

Address: Industrial Zone, Zouk Mosbeh, Lebanon

tel: +961 9 210 193

+961 9 214 043

fax: +961 9 219 807

email: haykalplast@haykalplast.com

P.O. Box: 70536 Lebanon

mobile: +961 3 309 552

+961 71 636 626

web: haykalplast.com