ALOM POLY EXTRUSIONS LIMITED
LASTING GENERATIONS

For enquiries or additional technical details please contact us at:

ALOM POLY EXTRUSIONS LIMITED

Alom House, 7B Pretoria Street,
Kolkata – 700071, West Bengal, India

Phone: +91-33-4010-6789
Fax: +91-33-2282-7305

Email: mktg@alom.in
Website: www.alom.in

Alcorr
Double Wall Corrugated Pipes

About Alom

Every few years there comes an organization that redefines standards and revolutionizes the way we live. Alom strives to be one such company where we create innovative products using environmentally friendly technology for a better tomorrow.

Alom Group of Companies, based in Kolkata, is one of the largest manufacturers of Aluminium Extrusions and its value added products for the last 25 years. We follow stringent ISO standards to deliver the highest quality products to our domestic as well as foreign markets. **Alom Poly Extrusions Limited** began as an effort to bring an advanced innovative product to the Indian market. We took up the initiative of being the pioneer in manufacturing Double Wall Corrugated Polyethylene (DWC HDPE) Piping system for underground non-pressure waste water conveyance applications.

Why **Alcorr**?

Alcorr pipes are Double Wall Corrugated pipes made with High Density Polyethylene material. They are externally corrugated and have a glass smooth surface inside. The pipes have a very high strength because of its design, are economically viable, have a very long life expectancy, and enumerable socio-environmental benefits that make them the most suitable pipes for underground sewerage and drainage applications.

DWC HDPE pipes are used all over the world as a standard in efficient waste water collection and transportation networks for the last 40 years. **Alcorr** pipes are manufactured using the world's best technology from Canada from a company having decades of experience in this field. These are the finest quality piping system for non-pressure underground sewerage, drainage and cross drainage (pipe culvert) applications.

These pipes help municipal bodies, urban conglomerates, agricultural drainage, and industries manage their waste water and rain water very efficiently. **Alcorr** pipes once installed are maintenance free, which allows it to lie underground for years. Such a system will not only protect the environment but also your investments.

Manufacturing is done through a comprehensive environmentally friendly process meticulously following Indian Standards **IS 16098 – 2** and also in line with International Standards **IS 21138 – 1 & 3 and EN 13476 – 1 & 3** .

CPHEEO, the central government environment and engineering policy making body, has also recommended the use of Double Wall Corrugated pipes for Indian Sewerage and Drainage applications, which is included in the latest manual.

Sizes

Sl. No.	Nominal I.D. (mm)	O.D. (mm)	Stiffness Class	Length (m)
1.	75	90	SN 4 or SN 8	6
2.	100	120	SN 4 or SN 8	6
3.	135	160	SN 4 or SN 8	6
4.	150	180	SN 4 or SN 8	6
5.	170	200	SN 4 or SN 8	6
6.	200	238	SN 4 or SN 8	6
7.	250	295	SN 4 or SN 8	6
8.	400	480	SN 4 or SN 8	6
9.	600	715	SN 4 or SN 8	6
10.	800	955	SN 4 or SN 8	6
11.	1000	1200	SN 4 or SN 8	6

**Certain other sizes are available on demand*

Fittings
Various Fittings and Accessories for all sizes are available on request


Tee


Bend


Reducer


Cross

Superior coupling technology

Alcorr pipes are manufactured with online integrated couplings or simple offline couplers to make it very convenient for installation and to minimize any leakages in the system. Jointing is as simple as push to fit using an elastomeric sealing ring to ensure leak proof joints with no possibility of infiltration or ex-filtration.

Advantages of **Alcorr**

Long Lasting	Service life of over 100 years.
Hydraulic efficiency	Manning's 'N' value of the pipe is 0.009-0.011 which also does not deteriorate during the entire life expectancy.
Ease of Installation	Uses lesser manpower and can be installed in very constrained locations.
Excellent Strength	Withstands constant heavy overload pressure.
Leak Tightness	Leak proof and no infiltration of ground water even in unfavorable bedding contour.
Socio-environmental benefits	Rapid laying of pipe does not disrupt urban and dense city clusters.
Economical	Material saving 65% in comparison to plastic smooth wall pipes enables cost savings. Weight of pipe is 95% lesser than traditional RCC pipes.
Chemical and biologically inertness	Deterioration of internal pipe condition on account of Crown Corrosion is non-existent as it doesn't react with aggressive chemicals.
Flexibility	Adaptable to all types of contour conditions and under critical external surface pressure like in earthquake prone areas.
Non-Corrosive	Not susceptible to corrosion or electrical interference.
Environmentally safe	No leaks, no cracks and no damage to environment and soil.

Applications of Alcorr

Sewerage projects
Highly corrosion resistant therefore ideal for long term applications in adverse conditions.

Effluents disposal and Industrial drainage
Ideal especially in time constrained industrial construction activities.

City and urban clusters
Simple and fast installation, easier handling and transportation which overcomes socio-environmental issues with underground pipe installations.

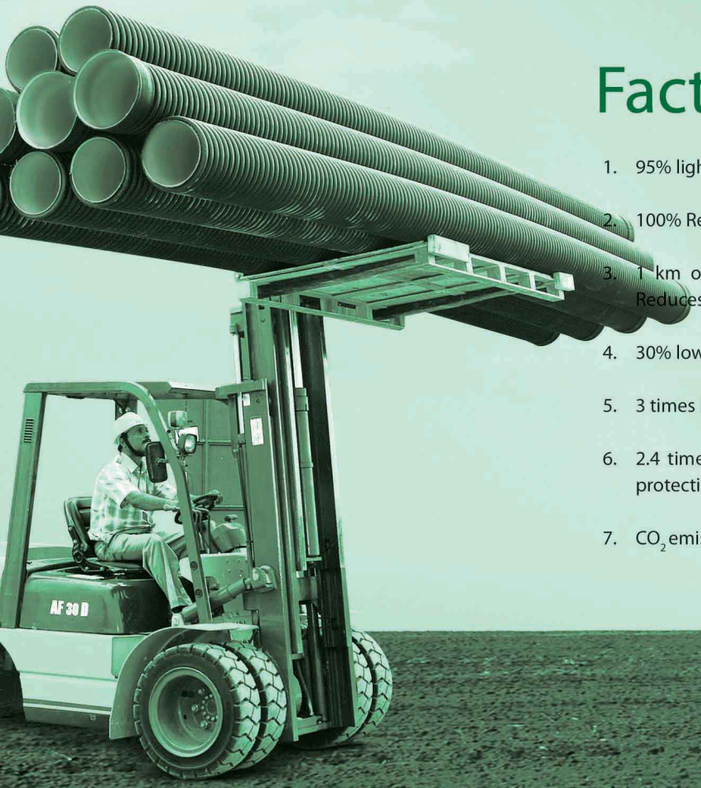
Urban sewerage rehabilitation
Economically most viable in crowded and haphazardly grown old core clusters of the city.

Highway and storm drainage
Anti leakage couplings create maintenance free drainage corridors.

Earthquake prone areas with high tectonic movements
High strength to weight ratio and flexibility helps adapting to uneven ground or earth movements.

Rainwater drainage
Easy drainage systems for agriculture, highways, cities and metropolitan areas.

Shallow and deep tube-well casing
Ensures high strength casing protection for tube well pipes



Facts and Figures

1. 95% lighter than Concrete pipes.
2. 100% Recyclable at the end of its usable life.
3. 1 km of 800mm Alcorr pipes can be transported in 25 trucks. Reduces transportation cost by 40% or more.
4. 30% lower annual amortized costs as compared to Concrete Pipes.
5. 3 times longer life compared to Concrete Pipes.
6. 2.4 times longer in length, fewer joints to ensure better leakage protection
7. CO_2 emissions for Concrete pipes is over 3 times that of plastic pipes

Quality, Standards & Certifications

Our testing facilities are capable of performing the most stringent tests required for the piping system as per ISO 21138-1 & 3 and EN 13476-1 & 3 and also as per the upcoming Indian Standard. This allows us to maintain a superior product quality which can be constantly monitored and improved over time. We are also certified by the ISO 9001:2008 as we ensure proper documentation and standardization of all our processes.

The essential tests for double wall corrugated polyethylene pipes as conducted in our laboratory are listed below:

1. Ring Flexibility
2. Ring Stiffness
3. Creep Ratio
4. Water Tightness Test
5. Tensile Test
6. Melt Flow Index Test
7. Impact Test
8. Environmental Stress Cracking Resistance Test
9. Oxidation Induction time

Case Study

Findings of an in-depth economical comparative analysis with routine NP3 Reinforced Concrete conduit system & alternative DWC HDPE Piping Network:

> The price comparison reveals that the Direct Capital cost for the Typical Sewerage Zone with Gravity Flow collection system comprising of DWC HDPE Pipes (inclusive of cost of sewage lifting stations) is significantly lower than the system designed with RC NP3 pipes.

> Fewer Sewage Lifting Stations dueto favorable sewer hydraulics when using DWC HDPE pipes

> Considerable reduction in annual maintenance costs and replacement cost. Least cost analysis shows the Present Amortized value of the Project with DWC HDPE Pipes shall be **decisively economical** in comparison to routine Non-Pressure Networks.

> Additionally there are Socio-environmental benefits due to reduction in the installation time on account of weight & ease of handling/ transportation/ laying.