

**ATLANTA**  
**HDPE SPIRAL**

*LARGE DIAMETER DRAINAGE AND SEWER PIPING SYSTEM*



**Easy To Install**

**High-Flow Capacity**

**Modern and Flexible**

**Economical**

**Corrosion Proof**

**Tough**

## APPLICATION

- 1.) Storm drain and Under-drain under foot ways
- 2.) Under-drain under "U" shape open gutter
- 3.) Slope Drain
- 4.) Catch drain for gushy water
- 5.) Building lots for factories
- 6.) Land-slippage protection
- 7.) Home lots
- 8.) Drainage for sports and school grounds
- 9.) Drainage for Agriculture field
- 10.) Treatment site for anti-pollution Industries
- 11.) Storm drain in golf course
- 12.) Drain from back filling into tunnel walls

## ADVANTAGES



### Easy to Install

The Atlanta Spiral is easy to hand-carry and to install without the use of mechanical devices. Screw-type coupling make pipe-to-pipe connections faster and easier.



### High-Flow Capacity

The Interior surface of the Atlanta Spiral is smooth to maximize flow and minimize the accumulation of silt, and reduce possibilities of clogging.



### Modern and Flexible

The Atlanta Spiral comes in standard 5.5m lengths and because it is made of high-grade HDPE, it is sufficiently flexible to follow ground contours.



### Economical

Unlike conventional pipes which are very heavy, the Atlanta Spiral is light weight and provides substantial savings on transportation, installation materials and equipment breakage.



### Corrosion Proof

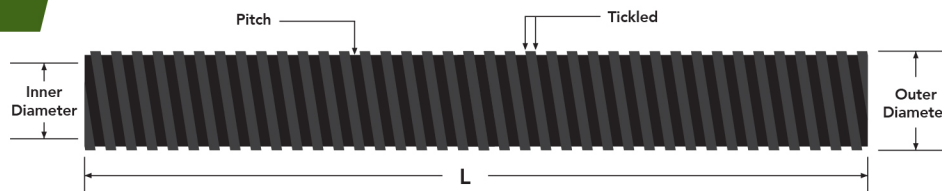
The Atlanta Spiral is not affected by any form of microbiological corrosion or attacks of fungi or chemicals, it is the ideal drainage system for industrial plants and factories.



### Tough

The Atlanta Spiral is made of superior high-density polyethylene (HDPE) resins and is excellent for local all-weather conditions. With its modified external rib reinforcement it can withstand external pressure.

## SPECIFICATIONS



**Jointing Method:** Screw Type

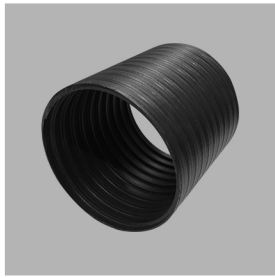
**Standard Length:** 5.5 meters

**Color:** Black

| Nominal Diameter |     | Inner Diameter | Outer Diameter | Tickled    | Pitch      | Connect Size | Length |
|------------------|-----|----------------|----------------|------------|------------|--------------|--------|
| in               | mm  | mm             | mm             | mm         | mm         | mm           | M      |
| 4                | 100 | 100 ± 1.5      | 116 ± 1.5      | 8.0 ± 0.6  | 15.0 ± 0.6 | 155          | 5.5    |
| 6                | 150 | 150 ± 2.0      | 173 ± 2.0      | 11.5 ± 0.7 | 18.0 ± 0.7 | 185          | 5.5    |
| 8                | 200 | 200 ± 2.5      | 231 ± 2.5      | 15.3 ± 0.8 | 25.0 ± 0.8 | 260          | 5.5    |
| 10               | 250 | 250 ± 2.5      | 281 ± 2.5      | 15.5 ± 0.8 | 27.0 ± 0.8 | 260          | 5.5    |
| 12               | 300 | 300 ± 3.0      | 331 ± 3.0      | 15.7 ± 1.0 | 30.0 ± 1.0 | 335          | 5.5    |
| 14               | 350 | 350 ± 3.0      | 381 ± 3.0      | 15.7 ± 1.0 | 30.0 ± 1.0 | 335          | 5.5    |
| 16               | 400 | 400 ± 4.0      | 439 ± 4.0      | 19.5 ± 1.2 | 38.0 ± 1.2 | 435          | 5.5    |
| 18               | 450 | 450 ± 4.0      | 489 ± 4.0      | 19.5 ± 1.2 | 38.0 ± 1.2 | 440          | 5.5    |
| 20               | 500 | 500 ± 4.5      | 546 ± 4.5      | 23.0 ± 1.2 | 45.0 ± 1.2 | 450          | 5.5    |
| 24               | 600 | 600 ± 5.0      | 660 ± 5.0      | 30.0 ± 1.4 | 55.0 ± 1.4 | 450          | 5.5    |
| 36               | 900 | 900 ± 8.0      | 988 ± 8.0      | 44.0 ± 2.0 | 72.0 ± 2.0 | 900          | 5.5    |



## HDPE SPIRAL FITTINGS



COUPLING



90° BEND



45° BEND



TEE



TEE REDUCER



CROSS TEE



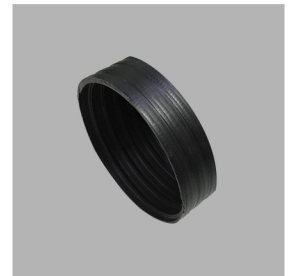
CROSS TEE REDUCER



WYE



DOUBLE WYE REDUCER



END CAP

## PHYSICAL PROPERTY

| Property                                | Unit                    | Typical Value       | Test Method |          |
|---|-------------------------|---------------------|-------------|----------|
|   |                         |                     |             |          |
| Density                                 | g/cm <sup>2</sup>       | 0.95                | ASTM D1505  | KSM3016  |
| Tensile Strength                        | kg/cm <sup>2</sup>      | 250                 | ASTM D638   | KSM3006  |
| Ultimate Elongation                     | %                       | >200                | ASTM D638   | KSM3006  |
| Tensile Modulus of Elasticity           | kg/cm <sup>2</sup>      | 7500                | ASTM D638   | KSM3006  |
| Flexural Modulus                        | kg/cm <sup>2</sup>      | 250                 | ASTM D780   | KSM3008  |
| Impact Strength (IZOD)                  | kg - cm/cm <sup>2</sup> | >12                 | ASTM D256   | KSM3055  |
| Brittleness Temperature                 | °C                      | -70                 | ASTM D148   | -        |
| Heat Distortion Temp.                   | °C                      | 78                  | ASTM D648   | -        |
| Coefficient of Linear Thermal Expansion | °C                      | 2 x 10 <sup>4</sup> | ASTM D696   | KSM3060  |
| (23°C, hr) Water Absorption             | mg                      | 0.01                | DIN 53472   | KSM3027  |
| Surface Resistivity                     | Ohm                     | >10 <sup>13</sup>   | DIN 53482   | KSM30334 |
| Volume Resistivity                      | Ohm x cm                | 10 <sup>14</sup>    | DIN 53482   | -        |
| Dielectric Constant                     | -                       | 2.32                | DIN 53484   | KSM304   |
| (Sheet/mm) Dielectric Strength          | KC/cm                   | 400                 | DIN 53481   | -        |

## APPLICABLE CHEMICAL SOLUTION

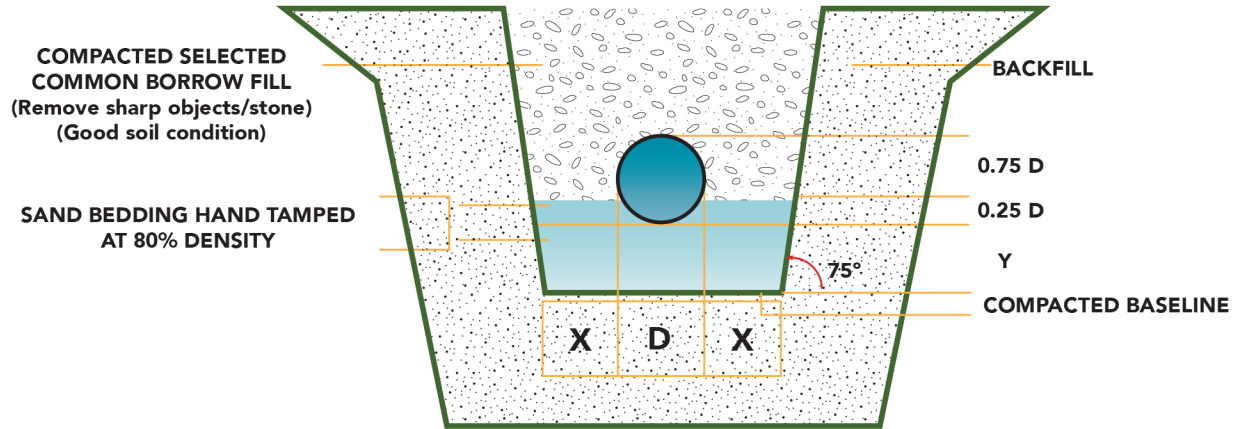
| Chemical Name                        | Temp. |      | Chemical Name                   | Temp. |      |
|--------------------------------------|-------|------|---------------------------------|-------|------|
|                                      | 23°C  | 60°C |                                 | 23°C  | 60°C |
| HCL (10%)                            | ●     | ●    | NaOH (50%)                      | ●     | ●    |
| HCL (35%)                            | ●     | ●    | Na <sub>2</sub> CO <sub>3</sub> | ●     | ●    |
| H <sub>2</sub> SO <sub>4</sub> (50%) | ●     | ●    | CH <sub>3</sub> COOAg           | ●     | ●    |
| H <sub>2</sub> SO <sub>4</sub> (70%) | ●     | ▲    | NH <sub>4</sub> OH              | ●     | ●    |
| H <sub>2</sub> SO <sub>4</sub> (90%) | ▲     | ✘    | H <sub>2</sub> O <sub>2</sub>   | ●     | ●    |
| CH <sub>3</sub> COOH (25%)           | ●     | ●    | Cl <sub>2</sub> (100%)          | ✘     | ✘    |
| CH <sub>3</sub> COOH (50%)           | ▲     | ✘    | Sea Water                       | ●     | ●    |
| H <sub>3</sub> PO <sub>4</sub> (50%) | ●     | ●    | CCL <sub>4</sub>                | ✘     | ✘    |
| H <sub>3</sub> PO <sub>4</sub> (90%) | ●     | ✘    | CH <sub>3</sub> OH              | ●     | -    |
| HF (60%)                             | ●     | ▲    | Gasoline                        | ▲     | -    |
| HF (100%)                            | ●     | ●    | Milk                            | ●     | ●    |
| Cr <sub>2</sub> O <sub>3</sub>       | ●     | ●    | Beer                            | ●     | ●    |
| Ca(OH) <sub>2</sub>                  | ●     | ●    | Benzene                         | ✘     | ✘    |

**Legend:**

● Resistant    ▲ Partially Resistant    ✘ Not Resistant

**LIMITATIONS:** Spiral pipes also have its limitations.  
Contact our authorized representatives to discuss its on site limitations

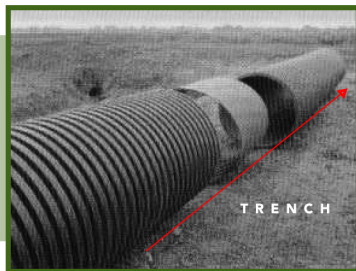
## RECOMMENDED TRENCHING



| D (in.) | X (mm.) | Y (mm.) | BACKFILL (mm.) |      |
|---------|---------|---------|----------------|------|
|         |         |         | MAX.           | MIN. |
| 4       | 70      | 70      | 2000           | 300  |
| 6       | 70      | 70      | 2000           | 300  |
| 8       | 70      | 70      | 2000           | 300  |
| 10      | 100     | 100     | 2000           | 300  |
| 12      | 100     | 100     | 2000           | 300  |
| 14      | 100     | 100     | 2000           | 300  |

| D (in.) | X (mm.) | Y (mm.) | BACKFILL (mm.) |      |
|---------|---------|---------|----------------|------|
|         |         |         | MAX.           | MIN. |
| 16      | 150     | 150     | 2000           | 300  |
| 18      | 150     | 150     | 2000           | 300  |
| 20      | 150     | 150     | 2000           | 300  |
| 24      | 150     | 150     | 2000           | 300  |
| 36      | 150     | 150     | 2000           | 300  |

## INSTALLATION



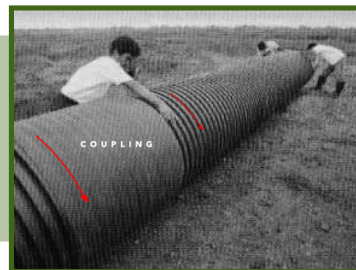
1.) Lay the pipes along the trenchline.



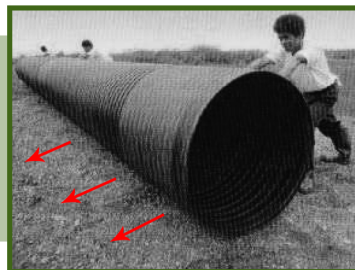
2.) Mark the full depth of insertion on the spigot.



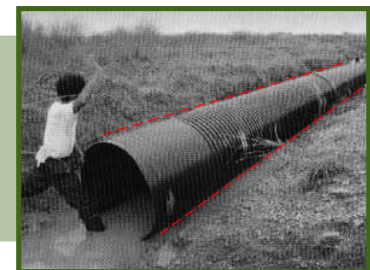
3.) Rotate clockwise the coupling into the spigot until reaching the checkmark.



4.) Rotate the other pipe into the coupling.



5.) Roll the assembled pipeline into the trench.



6.) Align the pipeline properly before backfilling.

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