



## **Marley NFT Hydroponic Pipe Solutions**

- Food graded PVC pipes
- Available in lengths from 1.5m up to 10m
- Fittings available
- Tried and tested
- UV Resistant

South Africa depends on the agriculture sector as the largest producer of food and driver of economic growth; however it is also the largest user of our scarce water resources. NFT (Nutrient Film Technique) Hydroponic technology is fast-growing in agriculture as the best way to overcome critical food and water shortages by offering a quicker, healthier, more sustainable method of food production.

### **What is NFT Hydroponics?**

NFT Hydroponics (loosely translated as “working-water”) is a method of growing produce using a flow of mineral nutrient water solutions instead of soil. The soilless nature of the system means that high-quality crops can be grown in any climate and in shorter times, providing a more reliable, predictable, eco-friendly and safe alternative to traditional crop systems.

## Why NFT Hydroponics?

Growing hydroponically offers significant advantages, both for the environment and for farmers as well as for consumers:

- Not dependent on seasonal activity:**  
Not affected by drought, flood and other climate-related issues
- Reduced water usage:**  
Compared to soil-based systems
- No pesticides or herbicides:**  
Pests, soil diseases and weeds can be better controlled without the use of harsh chemicals
- NFT Hydroponic nutrients are recyclable:**  
Waste water containing valuable water and nutrients can be collected, filtered, treated and recycled
- Growing time is lessened:**  
Accelerated growth due to correct balance of nutrients, water and oxygen
- Automated systems:**  
UV sensors allow for faster crop turnover and reduced labour
- Healthier produce:**  
Better control of environment significantly reduces plant stress and provides for a very healthy crop

## About Marley Pipe Systems

Marley is the leading manufacturer and supplier of quality plastic pipe systems. Our commitment to conserving water as a fundamental resource of life drives us to offer sustainable solutions for the agriculture sector of sub-Saharan Africa.

As an Aliaxis company, we offer our clients economic value and uncompromising service with SAPPMA endorsed quality solutions backed by a comprehensive range of PVC and HDPE pipes, fittings and accessories.

## Marley NFT Hydroponic Pipe Solutions

Marley manufactures a range of UV stabilised, food graded PVC pressure pipes ideally suited to NFT Hydroponic growing applications and backed by a range of complementary fittings to complete the system.

Pipe Specification: 100mm (w) x 50mm (h)

## Features & Benefits

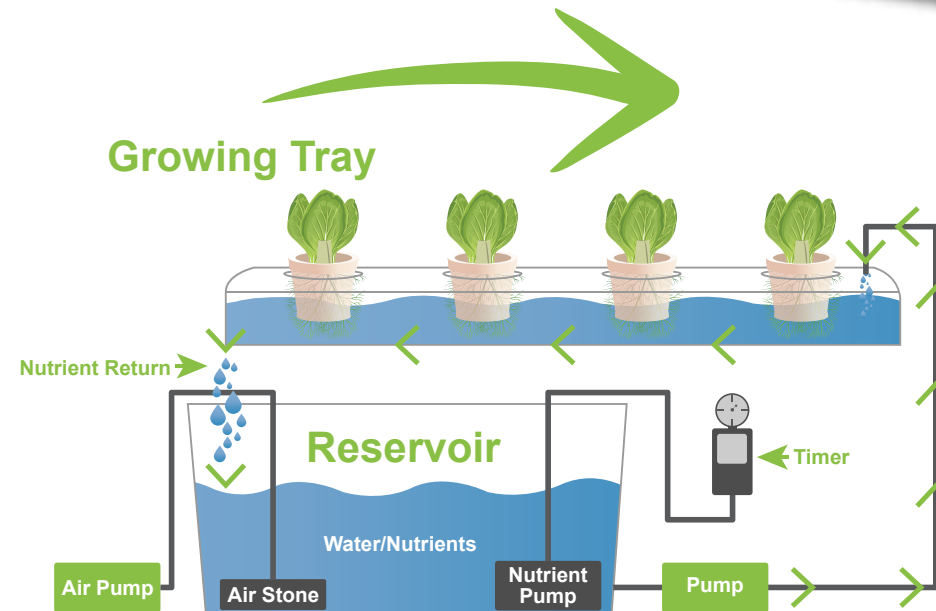
- **Long lengths available:** Pipe lengths range from 1.5m up to 10m lengths
- **Fittings available:** Supplied with stop end moulded fittings to complete the system
- **Food graded PVC:** Suitable for food use
- **Tried and tested:** Used by some of the largest lettuce suppliers in South Africa

## The NFT Hydroponic Process

### STEP 1: Reservoir Tank

A tank containing a nutrient water solution is pumped into a growing tray through a network of PVC pipes.

- ✓ The right balance of nutrients, water and oxygen **reduces harvesting time**
- ✓ Controlled environment reduces plant stress for **healthier produce**



### STEP 3: Recycling System

The nutrient water solution is directed via the pipes into a filter system where the waste water is collected, filtered, treated, recycled and pumped back into the reservoir tank.

- ✓ Nutrient water is recycled, **reducing overall water usage** significantly
- ✓ **Automated sensors** allow for faster crop turnover and reduced labour

### STEP 2: Growing Trays

Growing medium is placed into NFT Hydroponic pots and positioned in a tray which forms part of the pipe network that conveys the nutrient water solution.

- ✓ **Under cover** – not affected by climate-related issues (i.e. flood, drought, wind)
- ✓ **No soil** = no pesticides or diseases associated with soil



\* The graphic above is for illustration purposes only and technical aspects may differ.



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*For additional information on the latest product offerings from Marley Pipe Systems visit [www.marleypipesystems.co.za](http://www.marleypipesystems.co.za)*

For more information on Marley Pipe Systems' range of plastic pipes and fittings or for any technical advice and to locate your nearest Marley stockist, contact one of our branch offices below.

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