

## 10-Step Aluminium Orchard Ladder

### TECHNICAL SPECIFICATION SHEET



## Product Identification

Parameter	Specification
Product Name	10-Step Aluminium Orchard Ladder
Model Type	Professional Grade Orchard Ladder
Height	10 feet (3.05 meters)
Material	Premium Grade Aluminium Alloy
Application	Orchard harvesting, tree maintenance, professional fruit picking, general farm use

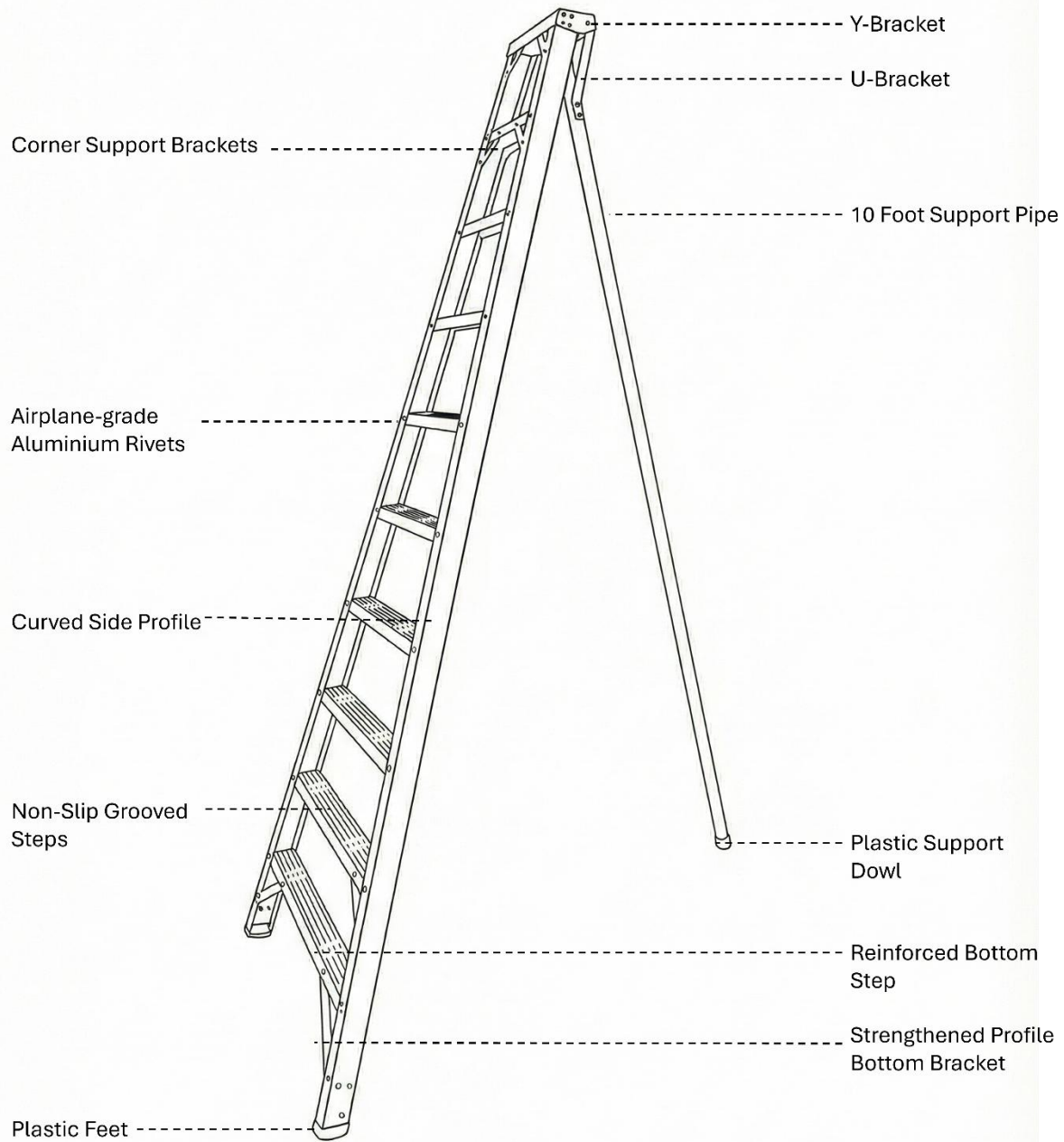
## Application & Use

Parameter	Specification
Primary Use	Professional orchard operations
Typical Applications	Fruit harvesting, tree maintenance, canopy work
Work Environment	Agricultural/horticultural settings
Operating Conditions	Outdoor, variable terrain, tree-based positioning
User Type	Agricultural workers

## Material Specifications

Component	Material	Grade/Standard
Ladder Frame	Aluminium Alloy	Premium structural grade
Steps	Aluminium Alloy	Reinforced profile structural grade
Fasteners	Aluminium Rivets	Airplane-grade
Pipe Cap	Plastic compound	Recycled plastic dowl
Ladder Feet	Plastic compound	Recycled plastic material
Corner and Bottom Brackets	Aluminium Alloy	Reinforced structural components
Y-Brackets	Stainless Steel	3CR12

## Structural Features



## Frame Components

Feature	Description	Benefit
<b>Corner Brackets</b>	Precision-engineered reinforcement at step corners	Enhanced structural integrity, prevents flex
<b>Reinforced Bottom Bracket</b>	Heavy-duty base support system	Stable foundation, weight distribution
<b>Y-Bracket Design</b>	Adjustable foot positioning system	Flexible terrain adaptation
<b>U-Bracket</b>	Stainless steel bracket connecting pipe to the y-bracket	Pipe and ladder connected as one for easy movements
<b>Aluminium Pipe</b>	Top stabilization pipe with plastic end cap	Easy maneuverability in trees, bark protection
<b>Non-slip Grooved Steps</b>	Steps from 1-9 with grooves	Extra strength and slip resistant
<b>Curved Side Profile</b>	Continuous flared side profile from top to bottom	Enhanced strength and uniformity
<b>Reinforced Bottom Step</b>	Profiled step designed with extra ridge in middle	Creates additional strength in frequently used bottom step
<b>Plastic Support Dowel</b>	Short plastic dowel positioned in the bottom of the pipe	Creates extra stability and slip resistance to the
<b>Plastic Feet</b>	Additional plastic foot on each side of ladder	Reduces tendency for feet to sink into the ground

## Part list

Item Name	Item Code	Description
<b>Step 1</b>	TRA002	Top two steps 272 x 272 (0°)
<b>Step 2</b>	TRA002	Third Step from top 300 x 295 (1°)
<b>Step 3</b>	TRA003	Fourth Step from top 322 x 320 (2°)
<b>Step 4</b>	TRA004	Fifth Step from top 364 x 360 (2°)
<b>Step 5</b>	TRA005	Fifth Step from bottom 426 x 414 (4°)
<b>Step 6</b>	TRA006	Fourth Step from bottom 496 x 486 (4°)
<b>Step 7</b>	TRA007	Third Step from bottom 578 x 566 (5°)
<b>Step 8</b>	TRA009	Second Step from bottom 672 x 658 (5°)
<b>Step 9</b>	TRA009	Bottom Step 774 x 760 (6°)
<b>Side Profile</b>	SID003	Side profile for 10ft ladder (3030 mm in length)
<b>10 Ft Pipe</b>	PYP003	Pipe for 10ft ladder (2860mm in length)

<b>Y-Bracket</b>	SS002	Stainless steel Y-Bracket for 10-Step ladder
<b>U-Bracket</b>	UBR001	Stainless connection for y-bracket and pipe
<b>Short dowl</b>	DOW001	Plastic dowl for bottom and top of pipe
<b>Rivets</b>	RIV001	Aircraft grade solid rivets
<b>Corner Bracket</b>	HOE001	Corner bracket for attachment between frame and steps
<b>Bottom Bracket</b>	BOT001	Profiled bottom bracket for additional support for bottom step
<b>Ladder foot plastic</b>	RUB001	Recycled plastic compound used for feet on ladder sides
<b>6mm x 60mm Bolt</b>	SES001	Bolt for fasteners where rivets cannot be used
<b>6mm Lock Nut</b>	LOC001	Lock nut for fasteners where rivets cannot be used
<b>100 x 25mm Bolt</b>	TEN001	Bolt for fasteners where rivets cannot be used
<b>10mm Nut</b>	LOC002	Lock nut for fasteners where rivets cannot be used

### Fastening System

Specification	Details
<b>Rivet Type</b>	Airplane-Grade Aluminium Rivets
<b>Standard</b>	Aerospace quality fastening
<b>Application</b>	All structural connection points throughout ladder
<b>Quality Level</b>	Professional-grade durability and reliability
<b>Corrosion Resistance</b>	Inherent Aluminium corrosion resistance

## Pipe Assembly Specifications

Component	Specification
Pipe Material	Premium Aluminium alloy
Pipe Length	2860mm
End Cap Material	Industrial grade recycled plastic compound
End Cap Function	Tree protection and maneuverability
Design Purpose	Smooth tree traversal without branch damage

## Performance Characteristics

Characteristic	Specification
Structural Rigidity	Enhanced through corner bracket reinforcement, curved structure and rivet fasteners
Stability	Professional-grade foundation support
Weight Distribution	Optimized through reinforced base bracket
Flex Resistance	Minimized through bracket reinforcement system
Safety Rating	Professional-grade construction standards

## Design Features Summary



**Curved Side Profiles:** Provides strength and stability

**Aircraft-Grade Aluminium Rivets:**  
Premium fastening throughout for  
long-term reliability and strength



**Pipe with Plastic End Cap:** Enables easy  
maneuverability in trees with bark protection

**Corner Brackets:** Strengthen selected steps for enhanced durability and rigidity



**Reinforced Bottom Bracket:** Provides sturdy, stable foundation for safe operation

**Y-Bracket Design:** Allows flexible foot adjustment for various terrain conditions



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