

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

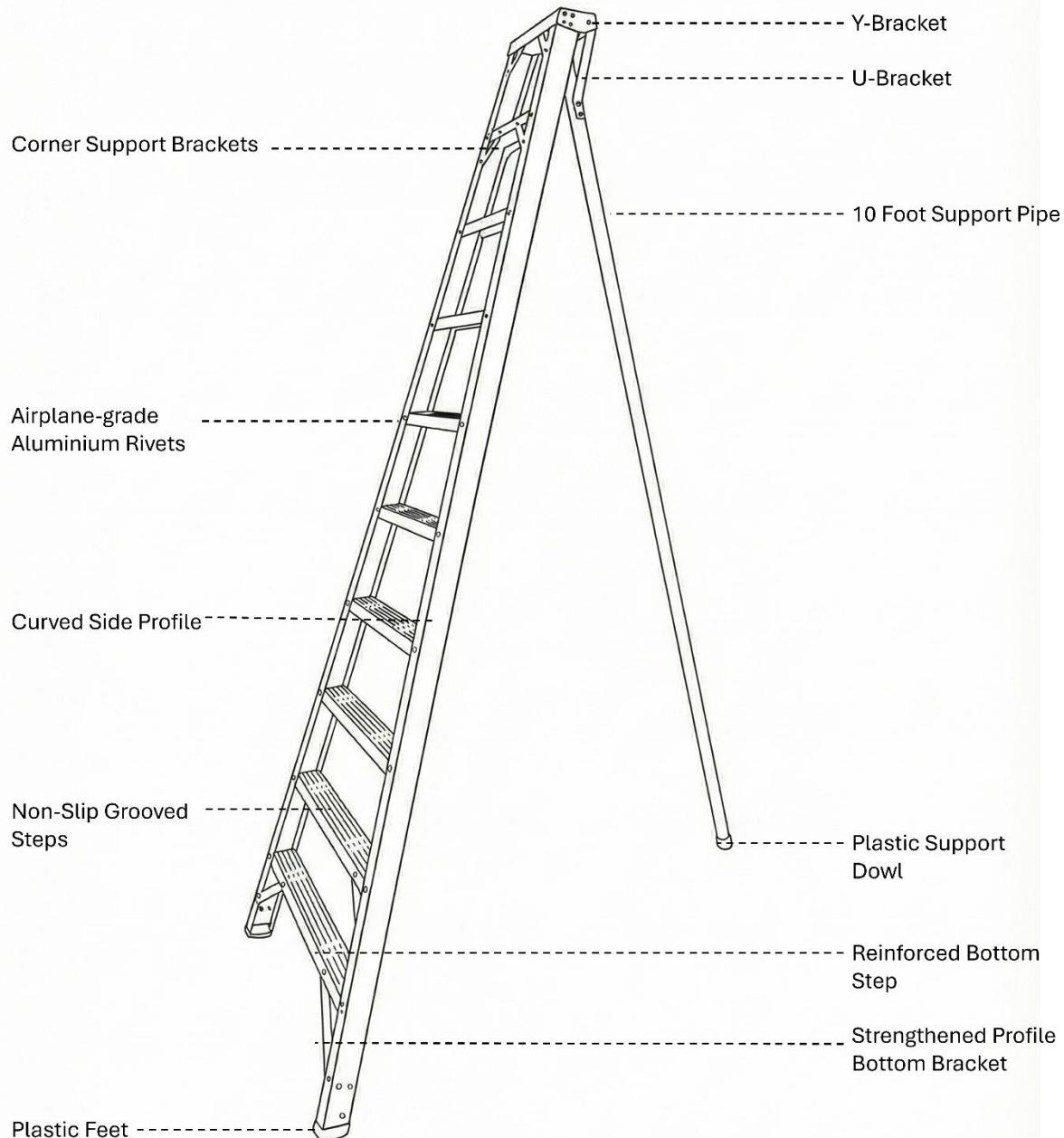
Application & Use

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

Part list

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

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

Fastening System

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



For technical or sales enquiries, contact:

Cronje Meiring – Industrial Engineer

Email: cronje@steppie.co.za

Johann Meiring – Business Owner

Email: johann@steppie.co.za

Denise Stoop – Administration Officer

Email: admin@steppie.co.za