



Accredited Africa Training Institute for Capacity Development

Unit FO409, Hatfield Plaza · 1122 Burnett St, Hatfield 0028 · Pretoria, Gauteng · South Africa

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COURSE BROCHURE

Fixing Methods For Piping Ducting And Equipment In Air Conditioning Refrigeration Ventilation Training

Manufacturing, Engineering and Technology / Manufacturing and Assembly

Unit Standard 116234 · NQF Level 2 · 6 Credits · 3 Days

COURSE OVERVIEW

This course equips learners with the knowledge and skills to apply correct fixing methods for piping, ducting, and equipment in air conditioning, refrigeration, and ventilation systems. It covers installation techniques, support systems, and compliance with South African standards to ensure safety and system integrity.

Category	Manufacturing, Engineering and Technology
Subfield	Manufacturing and Assembly
Unit Standard	116234
Accreditation	SAQA Accredited · NQF Level 2 · 6 Credits
Duration	3 days
Training Method	Online, On-Campus, In-House
Certificate	Issued via AATICD LMS – verifiable online

LEARNING OUTCOMES

- Apply appropriate fixing methods for piping, ducting, and equipment in HVACR systems.
- Demonstrate the correct use of tools and materials for securing components.
- Analyze installation requirements and select suitable support systems.
- Implement safety procedures and compliance with relevant standards.
- Evaluate the integrity of fixings and make adjustments as necessary.

WHO SHOULD ATTEND

- This course is intended for technicians, installers, and maintenance personnel in the HVACR industry who are involved in the installation and fixing of piping, ducting, and equipment.

COURSE OUTLINE

Day 1: Fundamentals of Fixing Methods and System Components

- Overview of HVACR systems and components requiring fixing
- Types of fixing methods: brackets, hangers, clamps, and anchors
- Material selection for fixings: metal, plastic, and composite options
- Principles of load distribution and structural integrity
- Thermal expansion and vibration considerations
- Introduction to SANS 10160 and other relevant standards
- Safety precautions during fixing installations
- Practical exercise: Identifying fixing methods in sample installations

Day 2: Installation Techniques for Piping and Ducting Fixings

- Step-by-step installation of pipe supports: clevis hangers, pipe rolls, and riser clamps
- Ductwork support systems: trapeze hangers, angle iron brackets, and threaded rods
- Fixing for refrigeration lines: insulated supports and vibration isolators
- Use of torque wrenches and leveling instruments
- Accommodating thermal expansion with expansion joints and sliding supports
- Alignment and levelling techniques for equipment bases
- Quality control checks: load testing and visual inspection
- Practical session: Installing fixings on a mock piping and ducting system

Day 3: Equipment Fixing, Integration, and System Verification

- Fixing methods for air handling units, condensers, and compressors
- Vibration isolation and noise control for equipment mounts
- Seismic restraints and bracing for HVACR equipment
- Integration of piping and ducting fixings with equipment supports
- System verification: checking alignment, clearance, and load distribution
- Common fixing failures: causes and remediation
- Documentation and maintenance records for fixings
- Practical assessment: Install and verify fixings for a complete HVACR system

ASSESSMENT & CERTIFICATION

Delegates are assessed through exercises and a final test. A mark of **50% or above** earns an **AATICD Certificate of Completion**, issued digitally with a unique verification code. This course carries **6 NQF credits** at **NQF Level 2**.

PRICING (PER DELEGATE, EX-VAT)

Delegates	Training Method	Price per Delegate	Total
1	Online	R 17,900.00	R 17,900.00
1	In-House	R 23,300.00	R 23,300.00
1	On-Campus (Pretoria)	R 26,800.00	R 26,800.00

UPCOMING SESSIONS

Start	End	Method	Venue
05 Aug 2026	07 Aug 2026	On-Campus	Pretoria, South Africa
05 Aug 2026	07 Aug 2026	On-Campus	Mauritius
10 Aug 2026	12 Aug 2026	On-Campus	Durban, South Africa
10 Aug 2026	12 Aug 2026	On-Campus	Dubai, UAE
11 Aug 2026	13 Aug 2026	On-Campus	Pretoria, South Africa
11 Aug 2026	13 Aug 2026	On-Campus	Mauritius
12 Aug 2026	14 Aug 2026	On-Campus	Abu Dhabi, UAE
12 Aug 2026	14 Aug 2026	On-Campus	Cape Town, South Africa

Contact us if no suitable date is listed – on-demand sessions can be arranged for groups.

HOW TO GET A QUOTE OR APPLY

1. **Get an instant quotation online:** visit www.aaticd.co.za, open the page for this course (Unit Standard 116234) and click **Get A Quote / Apply**. Select your training method and number of delegates – your quotation is generated immediately and emailed to you with the course brochure attached.
2. **Apply by email:** send the course title, your preferred training method (Online, In-House or On-Campus Pretoria), the number of delegates and your preferred dates to apply@aaticd.co.za – our team will reply with a formal quotation.
3. **Apply by phone or WhatsApp:** call +27 12 004 8389 or WhatsApp +27 65 077 6310 and we will prepare your quotation and reserve your seats.
4. **Confirm your booking:** accept the quotation and settle the invoice. As soon as payment is confirmed your delegates are enrolled and receive their AATICD LMS login details by email, along with joining instructions for their chosen training method.

Group discounts apply automatically – the more delegates you enrol, the lower the price per delegate. No payment is required to request a quotation.

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