

Defender™ rung ladders ... independently certified safety

The Defender differences add up to ladders that are easier and safer to climb as well as more robust. But don't just take our word for it: Defender brings the assurance of independently certified safety.

Carrying **StandardsMark™ certification**, Defender access and safety equipment is designed by engineers, tested in a specialised **NATA™-accredited** facility and installed by factory-trained installers.

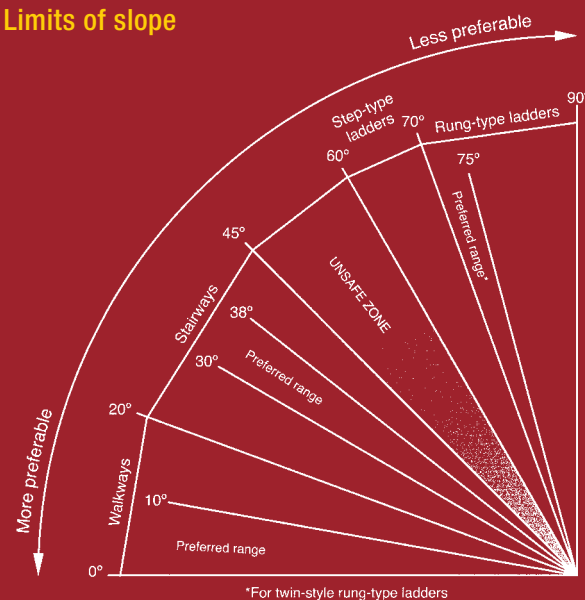
Defender ladders fully comply with the **National Construction Code, AS 1657, OHS legislation** and **state regulations**.

Most importantly, every Defender ladder is individually built to suit your site and the way your people work.

About the AS 1657 Standard

The **AS 1657 Standard** requires that the means of access shall be selected from the following limits of slope, and considered in the hierarchical order given:

Limits of slope



Defender's wide range of equipment includes all the means of access discussed in AS 1657, in addition to all components (stabilizing brackets, safety-lines, guardrails, hand-rails, cages, intermediate platforms, lockable gates, access hatches, etc.), for a complete and safe height access system.

Other **DEFENDER** safety products in the series:

- | | |
|-------------------------|-------------------------------|
| Access Hatches | Staircases |
| Cooling Tower Platforms | Static Lines & Rail Systems |
| Guardrails | Step Type Ladders |
| Landings & Platforms | Walkways |
| Roof Anchors | Internal & Suspended Walkways |



AS 1657 Approved

AS 1657 is the Australian Standard for the design, construction and installation of fixed platforms, walkways, stairways and ladders. This standard underpins Defender's performance.

ISO 9001 Quality

ISO 9001 is the world's most established quality framework, currently being used by over 750,000 organisations in 161 countries. This standard assures Defender's quality.

NATA™ Accredited Testing

NATA is the authority that provides independent assurance of technical competence through a proven network of best practice industry experts. The criteria for determining a facility's competence are based on the relevant international standard (e.g. ISO/IEC 17025, ISO 15189, ISO/IEC 17020). NATA provides assessment, accreditation and training services to laboratories and technical facilities throughout Australia and internationally.

CodeMark™ – National Construction Code Approved

The CodeMark scheme assures you of compliance with Australia's National Construction Code (formerly the BCA).

Get it done right, first time, for less.
Defender equipment and installation is
extraordinarily cost-effective. Why?
Because smart design shouldn't cost extra.

**CALL US TODAY ON 1300 013 794
TO ARRANGE A VISIT FROM A
CERTIFIED DEFENDER™ INSTALLER**

Rung ladders

CERTIFIED INSTALLATION



Independently certified safety

Quality certified design and installation

Designed and installed for full compliance to Australia's National Construction Code, ISO 9001 quality and AS 1657 standards.



Clearly labelled

All Defender rung ladders are clearly labelled to ensure traceability and display the load rating of the system.



Rungs designed for maximum foothold

Ergonomically designed rungs, providing broader, flatter support to maximize the foothold.



R10 slip resistance tested

Defender's rungs are tested in an independent NATA™-accredited laboratory to meet the outdoor walkway slip rating of R10 on a wet oil ramp test.



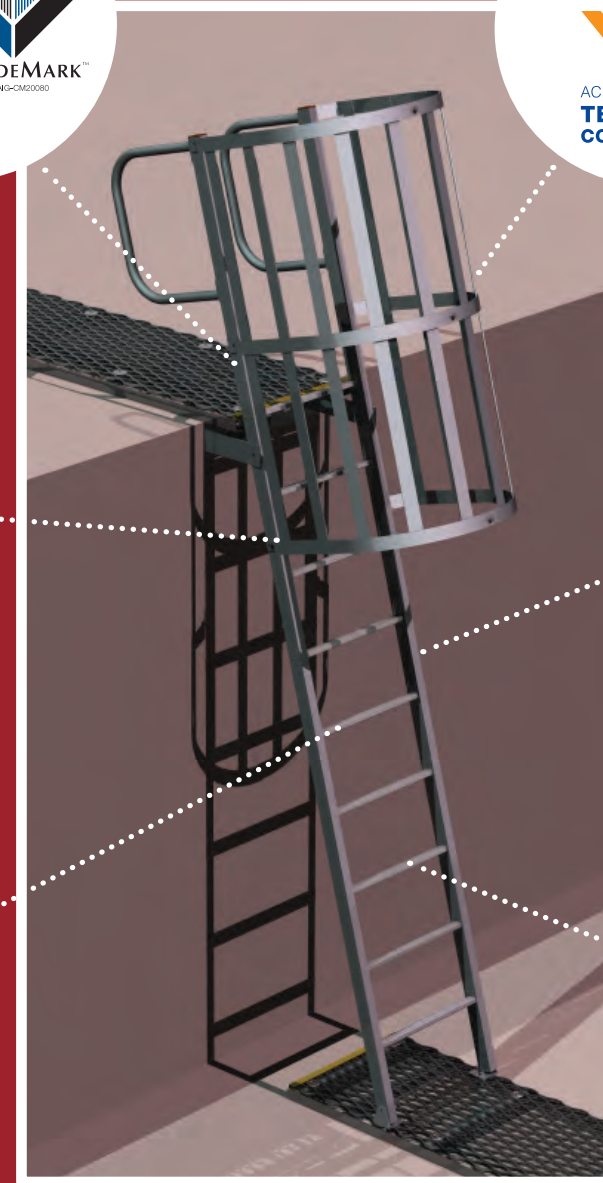
Single-span stile design

The stiles of Defender rung ladders are never spliced so you can count on a stronger, more rigid ladder.



Rigorously tested for a robust system

Defender rung ladders are tested in a NATA™-accredited laboratory to meet the nine mandatory tests required for stile, rung, fixing, extended stile strength and durability.



To order, receive a quote, or for more information contact us today at:

enquiries@workplacedefender.com.au
or call 1300 013 794

www.workplacedefender.com.au

Certified Defender™ Installer:

**workplace
access&safety®**

the fall prevention specialists

Telephone 1300 552 984
www.workplaceaccess.com.au



**Assured Compliance for
Optimal Safety**

www.workplacedefender.com.au

Defender™ Rung Ladders

Defender rung ladders are the safe and reliable choice for accessing roof areas, platforms and plant equipment.

They are designed and independently certified to fully meet the requirements of Australia's **National Construction Code** (formerly the **BCA**) and **AS 1657**, ensuring compliance with **Australian Standards, OHS legislation** and **state regulations**.

All Defender rung ladders are installed by Certified Defender Installers, ensuring the highest standards in quality, reliability and compliance with safety requirements.

Call 1300 013 794 today to speak to a Certified Defender™ Installer.



A thousand details add up to safe, manageable access across a leak-free roof.

Single-span stile: no weak points, greater rigidity

The stiles of Defender rung ladders are never spliced so you can count on a stronger, more rigid ladder.



A spliced stile adds a weak point to ladders and can increase flexing.



Well braced ladders for less flex

Defender rung ladders are braced at the correct intervals to maintain their 250kg load rating every 2.4 metres.



Inadequate bracing can cause excessive flexing, reducing the security of the ladder.



Enough room for a secure toe-hold

There is always 200mm of clear space behind Defender rung ladders.



Inadequate clearances mean users are unable to place their feet securely, increasing the risk of a fall.



Equal rung spacings for confident climbing

Defender rung ladders are built to order so that each and every rung is equal, from the bottom rung to the landing.



Uneven spacings can lead to mis-steps and injury.



Ladders inclined for an easier, safer ascent

Wherever possible, Defender rung ladders are installed at a 4:1 incline to be ergonomically accessible and relying on a person's lower body strength as indicated in studies*. (*Caple, D., 2012)



Vertical rung ladders are more difficult to climb, adding to fatigue.



Rungs designed for maximum foothold

Ergonomic research* shows the broader, flatter rungs of a Defender ladder maximize the foothold. (*Caple, D., 2012)



Narrow, round rungs are uncomfortable and offer less security.



Fixings that won't fail

Defender rung ladders are secured with positive, galvanised fixings.



Ladders should never use rivets or Tek screws for primary structural fixings and zinc coating should be avoided.



Bolts rather than welds for reliable rungs

Defender rungs are bolted, not welded. Mechanical fixing with additional fixings for redundancy guarantees rungs won't fail and dislodge from stiles.



Welding can be unreliable, particularly outside controlled conditions and to level 1 welding standards.

