

## Introduction

DATE: 05/03/2026

ShoreWorX shoring solutions are designed with the Australian market in mind. As you would expect from an Australian owned company with Australian manufactured products, we understand the need for superior quality, safety, dependability and durability. We have an outstanding reputation for delivering safe, reliable and efficient shoring solutions.

### Structural Design Certificate

| Panel Type (mm) | Panel Length (mm) | Panel Height (mm) | Panel Thickness (mm) | Min. width (mm) | Max. width (mm) | Strut size 0m>3.0m | Strut size 3.1m>4.0m | WLL- Triangular load/uniform load (kPa) | Weight (kg per panel) |
|-----------------|-------------------|-------------------|----------------------|-----------------|-----------------|--------------------|----------------------|-----------------------------------------|-----------------------|
| X-90 Lower      | 3100              | 2400              | 90                   | 600             | 4000            | 150x100x9          |                      | 91/60                                   | 349                   |

This design check has been carried out in accordance with Australian engineering principles and, in particular with the Australian Standards listed below:

**AS/NZS 1664 – 1997** Aluminium Structures

**AS 4744.1 – 2025** Shoring and trench lining – Design

**AS/NZS 1170.0:2002** Structural design actions: General principles

**AS/NZS 1170.1:2002** Structural design actions: Permanent, imposed and other actions

Certified by,

*Gagandeep Singh*

Gagandeep Singh

BEng, MEng, MIEAust, CPEng, NER (4681624), RPEQ 32858, RPEV PE0018102

Registered Professional Engineer NSW - PRE0002818

Engineer Design Specialist

ShoreWorX

ACN: 670 491 040



Rev.1

## Design Certification: Lifting points

### To Whom It May Concern:

ShoreWorX has conducted a structural design check on the lifting / handling points for the X-90 3100 x 2400 shoring panels. They have been reviewed, tested, and comply with AS4991-2004, AS1418.1-2002.

### Design Criteria

- **Load Capacity:**
  - The design ensures that each lifting / handling point on the X-90 panel is capable of handling a maximum Working Load Limit (WLL) of 6 tonnes, or 24 tonnes when utilising four lifting points.
  - Safety factor: **3** in accordance with AS 4991-2004- Lifting Devices.
- **Design Standards:**
  - Complies with
    - **AS4991-2004** Lifting Devices
    - **AS1418.1-2002** Crane, Hoists and Winches.

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