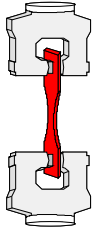


Mechanical Testing

- Tensile
- Compression
- Bend
- Shear
- Load
- Structures
- Fasteners
- Tensioning & Staying Systems
- Structural Bearings



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**TECHNICAL
COMPETENCE**



IN CONFIDENCE TO THE CLIENT

REPORT NO: MT-09/535

TESTING OF 1300TEMPFENCE TEMPORARY POOL FENCING

CLIENT: 1300TEMPFENCE
PO BOX 330
NIDDRIE VIC 3042

DATE OF TESTING: DECEMBER 1ST – DECEMBER 4TH 2009

DATE OF REPORT: DECEMBER 8TH 2009

TEST SYNOPSIS:

Temporary pool fence panels, a number of foot plates, star picket posts and gates fitted with an automatic closing device were delivered to the Melbourne Testing Services (MTS) laboratory for testing. Upon arrival at the laboratory the test items were inspected and the following fence identification details were recorded:

Fence Panels: 2.0m wide x 1.25m high

Gate Panel: 0.92m wide x 2.0m high

Fence Frame: 25mm x 25mm x 1.5mm zinc coated RHS.

Infill: Upright wire spacings: 67mm
Wire size: 8.0mm diameter horizontal bars
Wire Size: 5.0mm diameter vertical bars

Foot Plates: L=750mm, W=100mm, T=9.5mm.

Latch Type: Easy-Fit Ultimate Latch (Reg.Design 129523) with Easy-Fit Hinges

Latch Type: Magna-Latch (Patented by D&D Technologies) with TRU-CLOSE Easy-Fit Hinges

At the request of the client, tests were to be conducted in accordance with AS 1926.1-2007 SWIMMING POOL SAFETY. PART 1. SAFETY BARRIERS FOR SWIMMING POOLS.

The following tests were conducted in accordance with Section 3 Loading Requirements.

- 3.1 Strength and rigidity of openings
- 3.2 Strength of posts and footings
- 3.3 Strength of fencing components



FIG.1.
TEMPORARY POOL FENCE

TEST PREPARATION:

Temporary pool fence panels were prepared for testing in both single panel and continuous panel configurations. Continuous panel testing was conducted on four and five panel assemblies with the gate panel located in the middle. The temporary fencing was assembled using the supplied fixtures and in accordance with the manufactures assembly guidelines.

3.1 STRENGTH AND RIGIDITY OF FENCING OPENINGS

Testing was conducted in accordance with Appendix A on a single fence panel and a gate panel to determine if the infill material had sufficient strength to prevent a forced entry opening of the vertical bars. Testing was conducted in three evenly spaced locations across the width of the panel by applying a force through a cylindrical shaped object with a conical end (see Fig.2). The pull-through force was recorded for each test location.



FIG.2.
FENCE OPENING STRENGTH TEST

3.2 STRENGTH OF POSTS AND FOOTINGS

Testing was conducted in accordance with Appendix B on a continuous panel assembly, with two fence panels positioned either side of the gate panel. A test force of 330Newtons was applied through a cylindrical test object, as specified in AS 1926.1-2007 Fig. B1, to the top of the fence post nearest to the gate panel, in both inward and outward directions (see Fig.3). At completion of testing the fence post was inspected for signs of fracture and the gate post inspected for any damage that would prevent the gate from closing and latching. Gate panels fitted with the Easy-Fit latch and hinges were tested in the as-delivered condition and as per the client's installation. The second gate, fitted with the Magna-Latch locking mechanism and Tru-Close hinges were tested with the hinge spring tension tightened to the 2nd highest setting.



FIG.3.
STRENGTH TEST FOR POST

3.3 STRENGTH TEST FOR RIGID FENCING COMPONENTS

Testing was conducted in accordance with Appendix C on a continuous panel assembly consisting of two fence panels on one side of the gate panel and three fence panels on the opposite side. The fence panel closest to the gate panel on the three panel side was the focus of testing. A test force of 250N was gradually applied to the top rail of the fence panel with any permanent deformation noted. A gradual test force of 330N was then applied with the permanent deflection recorded and inspection for breakage or loosening of components carried out upon removal of the load. The above procedure was repeated with the focus of testing being the infill section of the same fence panel (see Fig.4).

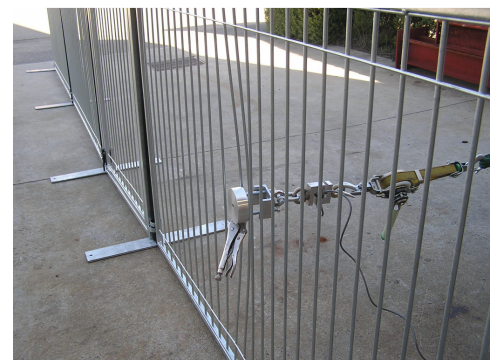


FIG.4.
INFILL STRENGTH TEST

TEST OBSERVATIONS & TEST DATA:

3.1 STRENGTH AND RIGIDITY OF FENCE OPENINGS

The 1300TempFence temporary pool fence panel and gate panel exceeded the minimum force of 150N required to pass the conical test object through the fence openings at three locations across the middle of the panels. Test deflections for each location are provided Table.1.

Test Location	Pull Through Force (N)	
	Fence Panel	Gate Panel
Left of Centre	224	340
Centre	260	262
Right of Centre	255	284

The 1300TempFence temporary pool fence panel and gate panel passed the test as required by AS 1926.1 Appendix A

**TABLE.1
TEST DATA**

3.2 STRENGTH OF POSTS AND FOOTINGS

At completion of testing there was no loosening of any of the fence components or fracture of the post observed. When the load was applied from the direction of outside the pool enclosure (inward), there was no damage observed to the gate and both gates successfully closed and latched.

When the load was applied from the direction of inside the pool enclosure (outward), there was no damage observed to the gate. However, due to the angular deflection in the post, neither gate was able to self return and latch from the fully opened position.

Therefore 1300TempFence temporary pool fence panel and gate panel passed the test as required in AS 1926.1 Appendix B, for the inward loading condition only.

3.3 STRENGTH TEST FOR RIGID FENCING COMPONENTS

Top of Fence Panel:

There was no permanent deflection recorded upon removal of the 250N test load.

There was no permanent deflection recorded upon removal of the 330N and no loosening or fracture was noted in any of the fence's components.

Fence Infill:

There was no permanent deflection recorded upon removal of the 250N test load.

There was 3mm of permanent deflection recorded upon removal of the 330N, less than the maximum of 10mm allowable permanent deflection. There was no loosening or failure noted in any of the fence's components.

The 1300TempFence temporary pool fence panel and gate panel passed the test as required in AS 1926.1 Appendix C

Notes:

- 1) Melbourne Testing Services (MTS) Pty Ltd shall not be liable for loss, cost, damages or expenses incurred by the client or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Melbourne Testing Services Pty Ltd be liable for consequential damages including, but not limited to, lost profit, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested.
- 2) This report is specific to the temporary pool fence panels described herein, in their state at the time of testing. It should not be taken as a statement that all similar temporary pool fence panel assemblies or components of temporary fence panel assemblies in all states of repair, would also perform in a similar manner to items described herein.
- 3) This report is specific to the tests strictly reported in terms of the specific clauses of AS 1926.1 as reported herein. MTS shall take no responsibility for the overall conformance of the pool fencing with all aspects of AS 1926.1 or any other Australian or International standards that may apply.
- 4) MTS shall take no responsibility for the procurement and authenticity of the temporary pool fencing as described herein.
- 5) It remains the responsibility of the client to ensure that the temporary pool fence panels tested are representative of the entire product batch.
- 6) MTS shall take no responsibility for the use of gate latch locking mechanisms other than those specifically detailed in this test report.



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