



TEST REPORT

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EVALUATION CENTER

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RENDERED TO

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PRODUCT EVALUATED
QRamp™
EVALUATION PROPERTY
Physical Load Testing

Report Of Testing Qramp™ System For Load Capacity In Accordance With Client Specifications.

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1 Table of Contents

| | | |
|--------|--|---|
| 1 | Table of Contents | 2 |
| 2 | Introduction | 3 |
| 3 | Test Samples | 3 |
| 3.1. | SAMPLE SELECTION | 3 |
| 3.2. | SAMPLE AND ASSEMBLY DESCRIPTION | 3 |
| 4 | Testing and Evaluation Methods | 4 |
| 4.1. | SPECIMEN PREPARATION | 4 |
| 4.2. | CONDITIONING | 4 |
| 4.3. | TEST PROCEDURES | 4 |
| 4.3.1. | Distributed Load..... | 4 |
| 4.3.2. | Concentrated Vertical Load..... | 5 |
| 4.3.3. | Handrail Load | 5 |
| 5 | Testing and Evaluation Results | 6 |
| 5.1. | RESULTS AND OBSERVATIONS..... | 6 |
| 5.1.1. | Statement of Measurement Uncertainty | 6 |
| 6 | Conclusion | 7 |
| 7 | Revision Page | 8 |

2 Introduction

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Ergo Platforms Inc. on QRamp™ for load capacity in accordance with client's instructions. This evaluation was performed from May 2 to May 7, 2012.

3 Test Samples

3.1. SAMPLE SELECTION

Samples were submitted to Intertek directly from the client. Samples were not independently selected for testing. Samples were received at the Evaluation Center on April 11, 2012.

3.2. SAMPLE AND ASSEMBLY DESCRIPTION

The QRamp™ system consisted of three straight running (ramp) sections, and one platform (landing) section. Each running section had a nominal floor area of 36 in. x 48 in. The platform section measured nominally 48 in. x 48 in. The system was set up with the top of the platform at a nominal height of 12 in. above the ground level. The running sections were set up to provide a constant slope up to the platform. This resulted in a slope of 1:12. The general layout of the ramp system is shown in Figure 1.

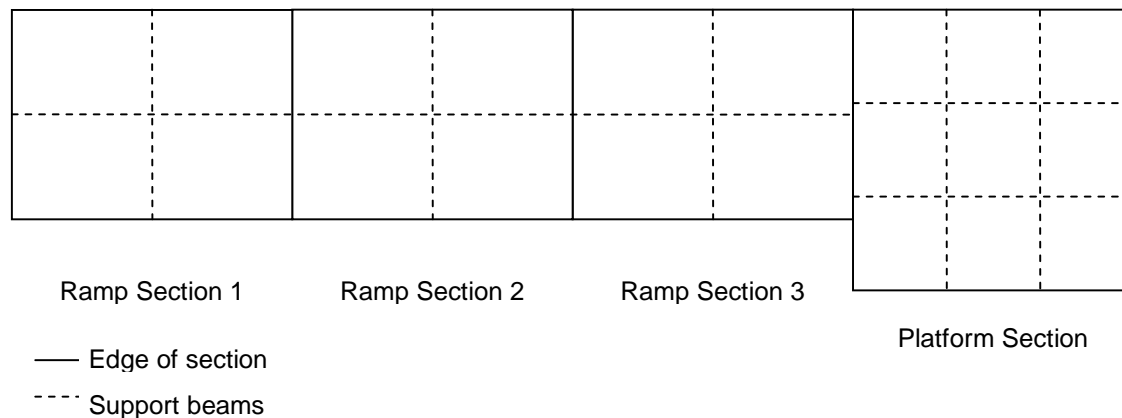


Figure 1: General Schematic Layout of QRamp System

The ramp system consisted of an aluminum box beam frame, with ThruFlow™ grated polymer decking installed on the aluminum frame as the top surface. Each section was supported by an adjustable length leg at each corner. The adjustable leg section was held in place by four clamping bolts. A handrail was mounted to the top of each post. The running sections used ThruFlow™ RPP 36 decking and the platform section used ThruFlow™ RPP 48 decking.

4 Testing and Evaluation Methods

4.1. SPECIMEN PREPARATION

The sample was assembled by the client at Intertek Testing Services laboratory in Mississauga, Ontario. After the legs were assembled, the bolt torque was measured. Based on the measured torque, all remaining bolts were tightened to 9.0 Nm (80 in-lbf).

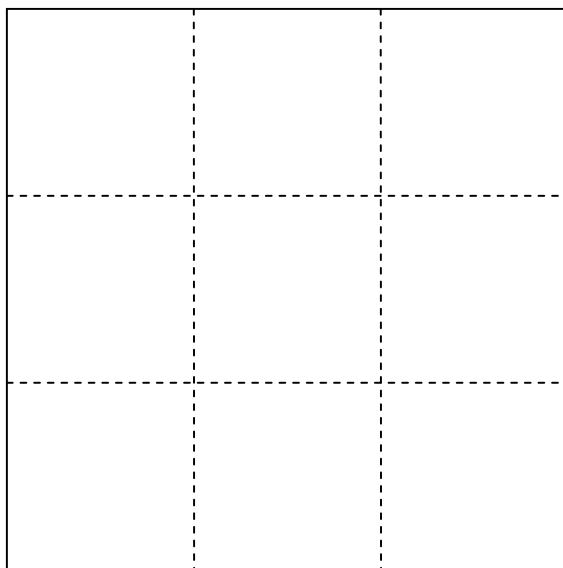
4.2. CONDITIONING

The samples were tested in the laboratory under ambient conditions. No specific conditioning parameters were required before testing.

4.3. TEST PROCEDURES

4.3.1. Distributed Load

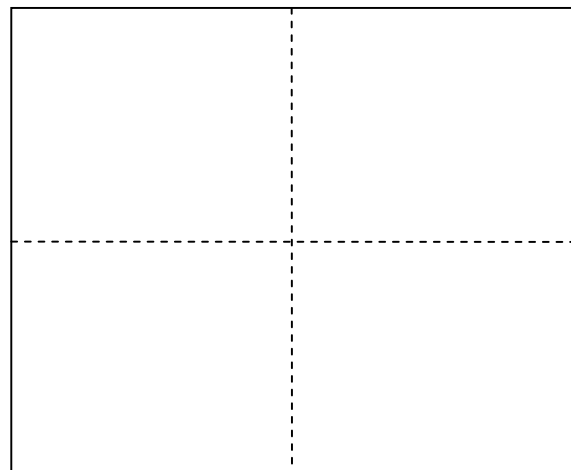
A distributed load test was conducted on the platform section and on the running section. The section under test was loaded to 1.9 kPa (39.7 lb/ft²) and then to 4.8 kPa (100 lb/ft²).



— Edge of section

---- Support beams

Figure 2: Platform Section - Distributed Load Displacement Locations



— Edge of section

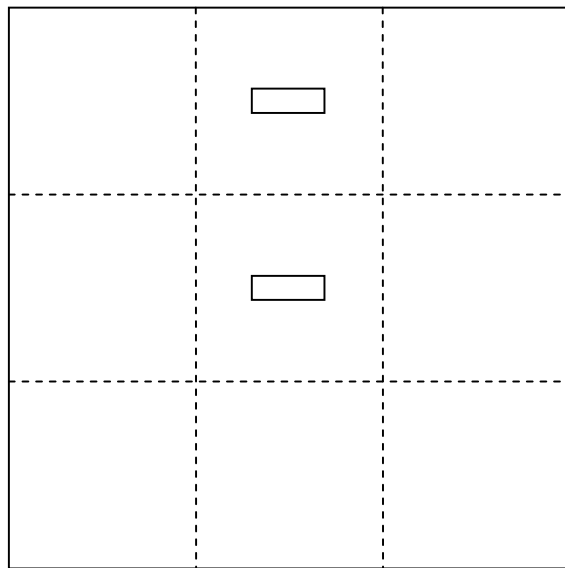
---- Support beams

Figure 3: Running Section - Distributed Load Displacement Locations

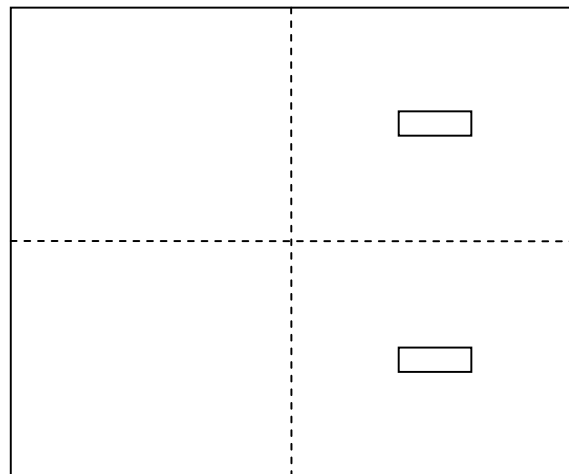
4.3.2. Concentrated Vertical Load

A concentrated vertical load test was conducted on the platform section and on the running section. The load was placed in the worst case location, between the metal frame supports. On the running section, the load was spaced 0.41 m (16 in.) on centre and on the platform, the load was spaced 0.46 m (18 in.) on centre. This placed the load directly on the widest span of polymer decking. A loading area of 38 mm x 89 mm (1.5 in. x 3.5 in.) was chosen based on the contact patch of a wheel chair tire.

A load of 386 kg (850 lbs) was applied across the two loading areas. Next, the load was increased to 545 kg (1200 lbs).



— Edge of section
 ---- Support beams
 □ Load application location



— Edge of section
 ---- Support beams
 □ Load application location

Figure 4: Platform Section, Concentrated Load - Load and Displacement Locations

Figure 5: Running Section 3, Concentrated Load - Load and Displacement Locations

4.3.3. Handrail Load

Load tests were conducted on the handrail. They were tested with a uniform load applied at the ¼ points and a single point load applied at the mid-point. The loads were applied independently in the horizontal outward direction and the vertical downward direction.

The horizontal load was applied to the handrail in the middle of the running section. The vertical load was applied to the handrail on the running section next to the platform, on the straight edge of the running-platform joint.

5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

| Section | Load | Result |
|----------|---|------------------|
| Platform | 4.8 kPa (100 lbs/ft ²) uniform | No failure |
| Running | 4.8 kPa (100 lbs/ft ²) uniform | No failure |
| Platform | 545 kg (1200 lbs) concentrated in two contact areas each 38 mm x 89 mm (1.5 in x 3 in) | No failure |
| | 771 kg (1700 lbs) concentrated in two contact areas each 38 mm x 89 mm (1.5 in x 3 in) | Ultimate failure |
| Running | 545 kg (1200 lbs) concentrated in two contact areas each 38 mm x 89 mm (1.5 in x 3 in) | No failure |
| | 771 kg (1700 lbs) concentrated in two contact areas each 38 mm x 89 mm (1.5 in x 3 in) | Ultimate failure |
| Handrail | 88 kg (194 lbs) uniform | No failure |
| Handrail | 92 kg (202 lbs) centre point | No failure |

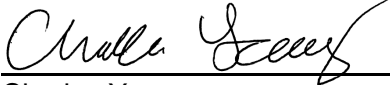
5.1.1. Statement of Measurement Uncertainty

When determining the test result, measurement uncertainty has been considered.

6 Conclusion

Intertek Testing Services NA Ltd. (Intertek) has conducted testing for Ergo Platforms Inc. on QRamp™ for load capacity in accordance with client's instructions and the results are reported herein.

INTERTEK TESTING SERVICES NA LTD.

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7 Revision Page

| Revision No. | Date | Changes | Author | Reviewer |
|---------------------|---------------|----------------|---------------|-------------------|
| 0 | June 27, 2012 | First issue | Charles Young | Claudio Sacilotto |
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