



REPORT NUMBER
QI1004367-12



America

PREPARED FOR
PLAYTOP, LLC
5697 TAYLOR ROAD
CLINTON, OHIO 44216

ATTENTION
MR. VINCE GARRETT

REPORT DATE
JUNE 1, 2010

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REPORTED / APPROVED BY:

TÜV SÜD America, Inc.

A handwritten signature in black ink, appearing to read 'D. Splane'.

Reported by: David Splane, Programs Coordinator
CERTIFICATION TEST PROGRAMS

A handwritten signature in black ink, appearing to read 'Timothy Fouchia'.

Approved by: Timothy Fouchia, Test Technician
CERTIFICATION TEST PROGRAMS



PURPOSE

The purpose of this test report is to present the test results obtained during the performance of a test program. This report includes a brief description of the samples presented for test, a list of the documents presented as test instructions, and a summary of the testing performed and the results obtained. Applicable requirements and conclusions are based on the criteria provided by our client, or as specified in the reference document(s).

WORK REQUESTED / REFERENCE DOCUMENT(s)

ASTM F1951-09b, Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

TEST SEQUENCE

1. Wheelchair work measurement method – straight propulsion with no material on a flat surface with a grade of 7.1%.
2. Wheelchair work measurement method – straight propulsion with material and no grade.
3. Wheelchair work measurement method – turning 90° with no material on a flat surface with a grade of 7.1%.
4. Wheelchair work measurement method – turning 90° with material and no grade.

Testing was performed on June 1, 2010.

SAMPLE DESCRIPTION

Playtop, LLC submitted a total of three, 39 inch X 48 inch X 1 ½ inch thick poured in place samples identified by Playtop, LLC as 1 ½ inch Poured-in-Place Safety Surfacing.



TESTING PERFORMED

ACCESSIBILITY OF SURFACE SYSTEMS

Procedure

Sample material, 1½ inch Poured-in-Place Safety Surfacing, was placed in TÜV SÜD America, Inc.'s accessibility test fixture. The sample was tested, propelling the wheelchair with four even propulsion strokes, per trial, across the material 6.56 feet, within eight seconds. This process was repeated five times for each test, (straight and 90° turn).

Per ASTM F1951-09b, section 5.1, no modification to test sample material occurred between propulsion trials.

Requirements

The average work force over one foot, in pound force-inch values, for straight propulsion and for turning with material, should be less than the average work per foot values for straight and turning on a flat surface with a grade of 7.1%.

Conclusion

The average work force over one foot, in pound force-inch values, measured lower when propelling the wheelchair over 1½ inch Poured-in-Place Safety Surfacing material, than when propelling the wheelchair over a flat surface with a grade of 7.1%. The material met the requirements of ASTM F1951-09b.

SAMPLE DISPOSITION

The sample material will be retained by TÜV SÜD America, Inc., for fifteen, (15), days, then disposed of at the discretion of TÜV SÜD America, Inc., unless otherwise requested by Playtop, LLC.



TEST EQUIPMENT

TÜV SÜD America, Inc.'s calibration system meets the requirements of ISO 17025:2005.

TÜV ID	Description	Manufacturer	Model	Calibration Due
09357	Signal Conditioner	Daytronics	3370	06/10
09715	Reaction Torque Sensor	Lebow	2110220500	06/10
09696	Digital Protractor	Mitutoyo	Pro 360	07/10
N/A	Wheelchair	Quickie	Q2	NCR
N/A	Accessibility Fixture	DTL	N/A	NCR

NCR – No Calibration Required

APPENDICES: Appendix A: Test Data



Material Name / Description: 1 1/2" Poured In Place Safety Surfacing

Propulsion Run #	No Material (work per foot) (lbf-in)	With Material (work per foot) (lbf-in)
Straight Run 1	102.01	22.51
Straight Run 2	102.27	22.89
Straight Run 3	104.26	21.88
Straight Run 4	103.44	20.54
Straight Run 5	104.88	21.89
Average	103.32	22.09

Turn Run 1	147.89	38.70
Turn Run 2	156.8	40.88
Turn Run 3	160.13	41.61
Turn Run 4	160.81	41.06
Turn Run 5	164.58	39.15
Average	159.25	40.36