TEST REPORT

RUBBERCYCLE, LLC
1985 Rutgers University Blvd.
Lakewood, NJ 08701

DTL REPORT NO	060701
REPORT DATE	11/28/01
RECEIVE DATE	11/15/01
CUSTOMER REF	5864

ATTN: Mr. Morris Hassan

SAMPLE DESCRIPTION

Rubbercycle, LLC submitted approximately 40 cubic feet of loose fill rubber material identified by Rubbercycle, LLC as Playsafer Black. Testing was performed on 11/27/01.

WORK REQUESTED/TEST SPECIFICATIONS

- Wheelchair Work Measurement Method, Straight Propulsion with no material on a flat surface with a grade of 7.1%.

- Wheelchair Work Measurement Method, Straight Propulsion with material and no grade.

- Wheelchair Work Measurement Method turning 90° with no material and a grade of 7.1%.

- Wheelchair Work Measurement Method turning 90° with material and no grade.

ASTM F1951-99 – Determination of Accessibility of Surface Systems Under and Around Playground Equipment.

CONCLUSION

The average work force per Newton Meter measured lower when rolling over the compacted Playsafer Black playground material than when rolling on a flat surface with a grade of 7.1%. The tested material met the requirements of the specification and are ADA Approved.

TEST RESULTS

Procedure: Test material (Playsafer Black) was placed into fixture at an initial depth of 3" and compacted using a 6" diameter Pneumatic Compactor atop a 4' x 5'x ¾" plywood sheet. A second layer of Playsafer Black material was then placed into fixture attaining a total depth of 6" and compacted as described above. Sample material was evaluated rolling the wheelchair with 4 even pushes across the material, 6.56 ft., within 7.0 ± 1.05. This procedure was repeated five (5) times for each (straight propulsion and 90° turn).

- Wheelchair Rider Weight = 174.5 lbs.
- Total System Weight (Rider and Wheelchair Combined) = 207.6

Results: Playsafer Black, Compacted

RUN #	NO MATERIAL WORK PER METER	WITH MATERIAL WORK PER METER
Straight Run 1	11.887 NM	11.047 NM
Straight Run 2	12.409 NM	11.589 NM
Straight Run 3	12.023 NM	11.963 NM
Straight Run 4	11.672 NM	12.802 NM
Straight Run 5	11.943 NM	11.781 NM
Average	**11.953 NM**	**11.777 NM**
Turn Run 1	12.452 NM	10.069 NM
Turn Run 2	12.815 NM	10.322 NM
Turn Run 3	12.812 NM	11.156 NM
Turn Run 4	12.900 NM	10.455 NM
Turn Run 5	13.145 NM	11.544 NM
Average	**12.842 NM**	**10.893 NM**

ASTM F1951-99 – Work per Meter Average was determined discarding the high and low work per Newton Meter values and averaging the 3 remaining trials.

- Average Work per Meter Straight Propulsion, No Material, Grade of 7.1% = 11.953 NM
- Average Work per Meter Straight Propulsion with Material = 11.777 NM
- Average Work per Meter, Turning 90°, No Material, Grade of 7.1% = 12.842 NM
- Average Work per Meter, Turning 90° with Material and No Grade = 10.893 NM

TEST RESULTS CONTINUED

Requirements: The average work per Newton Meter for straight propulsion and for turning should be less than the average work per Newton Meter for straight and turning on a flat surface with a grade of 7.1%.

TEST EQUIPMENT

Detroit Testing Laboratory, Inc.'s calibration system meets the requirements of ISO 17025:1999.

- DTL Wheelchair Accessibility Fixture
- Quickie Wheelchair, Model Q2
- Strain Gauge Reaction Torque Sensor, Lebow, Model 2110-110-500, ID #09715-Z, Calibrated to 08/16/01
- Signal Conditioner, Daytronics, Model 3370, ID #09361, Calibrated to 12/11/01
- Digital Protractor, Mitutoyo, Model Pro 360, ID #08696, Calibrated to 06/18/02
- Tape Measure, ID #10043, Calibrated to 12/06/01
- 4 Foot Level
- 6" Diameter Pneumatic Compactor – Rental per Job
- 4' x 5' x ¾" Plywood Sheet

SAMPLE DISPOSITION

The sample material will be retained for 30 days, then disposed of at the discretion of DTL unless otherwise instructed by Rubbercycle, LLC.

Reported by:

DETROIT TESTING LABORATORY, INC.

David Splane
Certification Programs Coordinator

Keith Shelton
Certification Programs Manager

DS/KS/cr

Enclosure: Terms and Conditions