

SGI TESTING SERVICES

A GEORGIA LIMITED LIABILITY COMPANY

21 May 2011

Mr. Mao Xianzhong Feicheng Lianyl Engineering Plastics Co. Ltd Feicheng New Hightech Development Zone Shandong, China

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ATTACHMENT 1 Typolarioda

50-50, 80-80, 100-100 Fibergiass Geogrids

Dear Mr. Mar

TENSILE TEST RESULTS

SGI Testing Services, LLC (SGI) is pleased to present the attached test results for the above-mentioned testing program. The note section below addresses sample preparation, sample disposal and a disclosure statement.

SGI appreciates the opportunity to provide laboratory testing services to Feichong Lianyi Engineering Plastics Co Ltd. Should you have any questions regarding the attached document(s), or if you require additional information, please do not besitate to contact the undersigned.

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Zehong Yuan, Ph.D., P.E.

Atrachment

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MAIL TO: SGI TESTING SERVICES, LLC

WEST SITES WWW.INTERACTIONSPECIALISTS.COM

FACILITY LOCATION (405 INTERNATIONAL SEVEL, SHITE B-1.) 7 NORCROSS. GA 20033

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SGI TESTING SERVICES

A GEORGIA LIMITED LIABILITY COMPANY

21 May 2011

Mr. Mao Xianzhong Feicheng Lianyi Engineering Plastics Co, Ltd Feicheng New Hightech Development Zone Shandong, China

Subject:

Laboratory Test Results Transmittal

Geogrid Testing

50-50, 80-80, 100-100 Fiberglass Geogrids

Dear Mr. Mao,

SGI Testing Services, LLC (SGI) is pleased to present the attached test results for the above-mentioned testing program. The note section below addresses sample preparation, sample disposal and a disclosure statement.

SGI appreciates the opportunity to provide laboratory testing services to Feicheng Lianyi Engineering Plastics Co Ltd. Should you have any questions regarding the attached document(s), or if you require additional information, please do not hesitate to contact the undersigned.

Sincerely,

Zehong Yuan, Ph.D., P.E. Laboratory Manager

Attachments

NOTES:

(1) Unless otherwise noted in the test results the sample(s)/specimen(s) were prepared in accordance with the applicable test standards or generally accepted sampling procedures (2) Contaminated/chemical samples and all related laboratory generated waste (i.e., test liquids, PPE, absorbents, etc.) will be returned to the client or designated representative(s), at the client's cost, within 60 days following the completion of the testing program, unless special arrangements for proper disposal are made with SGI. (3) Materials that are not contaminated will be discarded after test specimens and archived specimens are obtained. Archived specimens will be discarded 30 days after the completion of the testing program, unless long-term storage arrangements are specifically made with SGI.

(4) The reported results apply only to the materials and test conditions used in the laboratory testing program. The results do not necessarily apply to other materials or test conditions. The test results should not be used in engineering analysis unless the test conditions model the anticipated field conditions. The testing was performed in accordance with general engineering testing standards and requirements. The reported results are submitted for the exclusive use of the client to whom they are addressed.

SGI11001.REPORT.2011.08.FIBERGLASS.

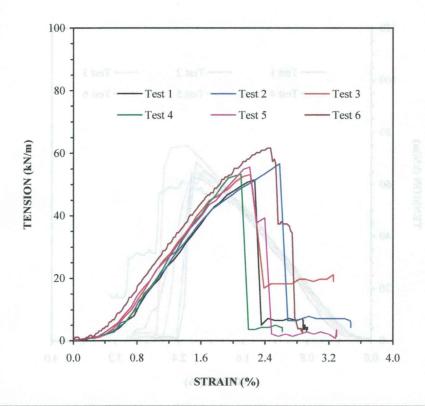
MAIL TO: SGI TESTING SERVICES, LLC P.O. BOX 2427 LILBURN, GA 30048-2427

WEB SITE: WWW.INTERACTIONSPECIALISTS.COM

FACILITY LOCATION 4405 INTERNATIONAL BLVD., SUITE B-117 Norcross, GA 30093

PHONE: 770.931.8222 FAX: 770.931.8240

50-50 Fiberglass Geogrid Sample #2 in Machine Direction SGI Lab Sample ID: S15884



Test No.	Tension at 2% (kN/m)	Tension at 5% (kN/m)	Tension at 10% (kN/m)	Ultimate Strength (kN/m)	Strain at Ultimate (%)
0.01	47.8	NA	NA	51.3	2.2
2	47.1	NA	NA	56.8	2.6
2.3	50.1	NA	NA	53.3	3.0
4	52.6	NA	NA	53.4	2.1
5	51.2	NA	NA	55.7	2.2
6	54.3	NA	NA	61.7	2.4
Mean	50.5	NC	NC	55.4	2.4
STD	2.8	NC	NC	3.6	0.3

NOTES:

Clamp:

Curtis Sure Grip, Inc. (Curtis) GeoGrips

Specimen Width (ribs):

39.4

Rib Count (ribs/m):

Specimen Length (mm):

450

Slack Correction (N):

NA

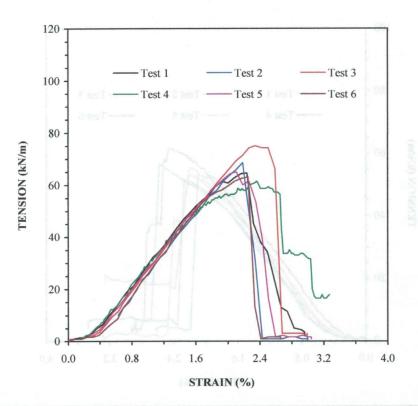
Strain Rate (% per minute):

10



DATE REPORTED	4/20/2011	
FIGURE NO.	1	8
PROJECT NO.	SGI11001	11
DOCUMENT NO.		71
FILE NO.		19

50-50 Fiberglass Geogrid Sample #2 in Cross-Machine Direction SGI Lab Sample ID: S15884



Test No.	Tension at 2% (kN/m)	Tension at 5% (kN/m)	Tension at 10% (kN/m)	Ultimate Strength (kN/m)	Strain at Ultimate (%)
12.2	60.7	NA	NA	64.6	2.2
2	63.0	NA	NA	68.5	2.2
3	65.5	NA	NA	75.0	2.3
4	56.1	NA	NA	61.3	2.4
5	63.6	NA	NA	65.0	2.1
6	59.6	NA	NA	63.1	2.2
Mean	61.4	NC	NC	66.3	2.2
STD	3.3	NC	NC	4.9	0.1

NOTES:

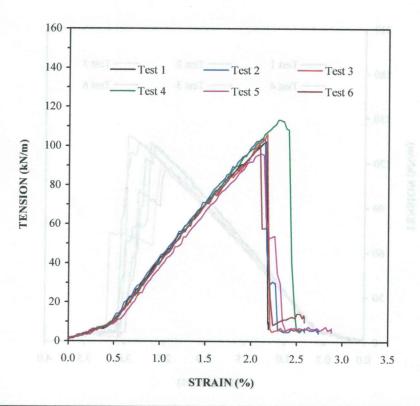
Clamp: Curtis Sure Grip, Inc. (Curtis) GeoGrips

Specimen Width (ribs): 1
Rib Count (ribs/m): 39.4
Specimen Length (mm): 450
Slack Correction (N): NA
Strain Rate (% per minute): 10



DATE REPORTED	4/20/2011	
FIGURE NO.	2	
PROJECT NO.	SGI11001	-
DOCUMENT NO.	K = A)	
FILE NO.	A CONTRACTOR	

80-80 Fiberglass Geogrid in Machine Direction SGI Lab Sample ID: S15684



Test No.	Tension at 2% (kN/m)	Tension at 5% (kN/m)	Tension at 10% (kN/m)	Ultimate Strength (kN/m)	Strain at Ultimate (%)
~ 0.51	95.1	NA	NA	102.3	2.2
2	99.5	NA	NA	104.1	2.1
0.43	95.4	NA	NA	106.2	2.2
4	98.4	NA	NA	114.1	2.3
5	92.0	NA	NA	97.0	2.1
6	95.5	NA	NA	100.7	2.1
Mean	96.0	NC	NC	104.1	2.2
STD	2.7	NC	NC	5.8	0.1

NOTES:

Clamp: Curtis Sure Grip, Inc. (Curtis) GeoGrips
Specimen Width (ribs): 1

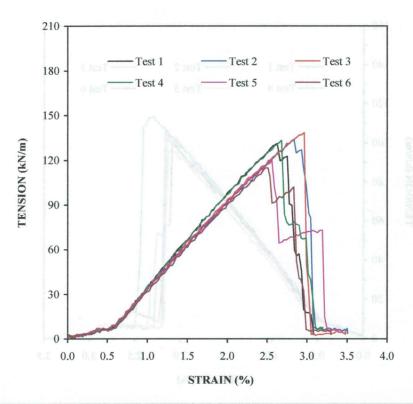
Rib Count (ribs/m): 39.4
Specimen Length (mm): 450
Slack Correction (lbs): NA
Strain Rate (% per minute): 10

DATE REPORTED	1/30/2011
FIGURE NO.	3
PROJECT NO.	SGI11001
DOCUMENT NO.	· K-P-VII
FILE NO.	S-271



SGI TESTING SERVICES, LLC

80-80 Fiberglass Geogrid in Cross-Machine Direction SGI Lab Sample ID: S15684



Test No.	Tension at 2% (kN/m)	Tension at 5% (kN/m)	Tension at 10% (kN/m)	Ultimate Strength (kN/m)	Strain at Ultimate (%)
122	98.1	NA	NA	131.9	2.6
2	91.1	NA	NA	134.0	2.8
3	93.2	NA	NA	138.3	3.0
4	96.9	NA	NA	133.3	2.7
5	91.5	NA	NA	120.5	2.6
6	90.3	NA	NA	116.9	2.5
Mean	93.5	NC	NC	129.1	2.7
STD	3.3	NC	NC	8.5	0.2

NOTES:

Clamp: Curtis Sure Grip, Inc. (Curtis) GeoGrips

Specimen Width (ribs): 1
Rib Count (ribs/m): 39.4
Specimen Length (mm): 450
Slack Correction (lbs): NA
Strain Rate (% per minute): 10



SGI TESTING SERVICES, LLC

DATE REPORTED 1/30/2011

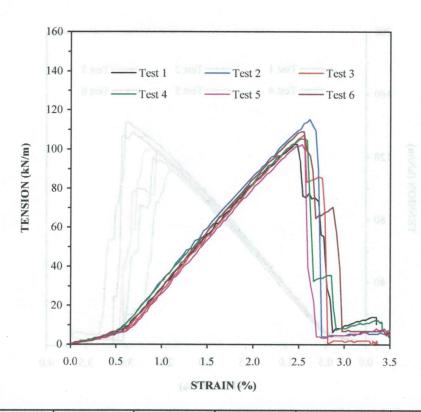
FIGURE NO. 4

PROJECT NO. SGI11001

DOCUMENT NO.

FILE NO.

100-100 Fiberglass Geogrid in Machine Direction SGI Lab Sample ID: S15685



Test No.	Tension at 2% (kN/m)	Tension at 5% (kN/m)	Tension at 10% (kN/m)	Ultimate Strength (kN/m)	Strain at Ultimate (%)
0.01	82.1	NA	NA	103.9	2.5
2	86.4	NA	NA	115.3	2.6
3	82.2	NA	NA	107.5	2.6
4.54	82.8	NA	NA	105.3	2.5
8.55	80.1	NA	NA	102.5	2.5
6	85.0	NA	NA	108.9	2.5
Mean	83.1	NC	NC	107.2	2.5
STD	2.3	NC	NC	4.6	0.0

NOTES:

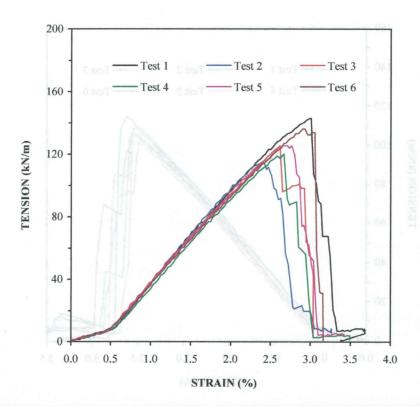
Clamp: Curtis Sure Grip, Inc. (Curtis) GeoGrips
Specimen Width (ribs): 1
Rib Count (ribs/m): 39.4
Specimen Length (mm): 450

Slack Correction (lbs): NA
Strain Rate (% per minute): 10

DATE REPORTED	1/30/2011	
FIGURE NO.	5	1
PROJECT NO.	SGI11001	推
DOCUMENT NO.		1
FILE NO.		1



100-100 Fiberglass Geogrid in Cross-Machine Direction SGI Lab Sample ID: S15685



Test No.	Tension at 2% (kN/m)	Tension at 5% (kN/m)	Tension at 10% (kN/m)	Ultimate Strength (kN/m)	Strain at Ultimate (%)
12.5	97.1	NA	NA	143.8	3.0
8.02	98.0	NA	NA	114.6	2.4
3	96.1	NA	NA	125.3	2.6
2.54	91.0	NA	NA	120.3	2.6
5	94.4	NA	NA	125.3	2.6
6	92.8	NA	NA	136.0	2.9
Mean	94.9	NC	NC	127.6	2.7
STD	2.7	NC	NC	10.6	0.2

NOTES:

Clamp: Curtis Sure Grip, Inc. (Curtis) GeoGrips

Specimen Width (ribs): 1
Rib Count (ribs/m): 39.4
Specimen Length (mm): 450
Slack Correction (lbs): NA
Strain Rate (% per minute): 10



DATE REPORTED	1/30/2011	
FIGURE NO.	6	1
PROJECT NO.	SGI11001	
DOCUMENT NO.		79
FILE NO.		-1