

Logged in 2/22/10 SW  
Logged out 3/3/10 SW

**CRIFE ARCHITECTS + ENGINEERS**

Architects, Engineers & Surveyors 317-844-6777

PJT. NO. 090324-20000 SUBMIT NO. 334600 Subdrainage Geotextile

- APPROVED  
Fabrication/installation may be undertaken. Approval does not authorize changes to the Contract Sum or Contract Time.
- APPROVED AS CORRECTED
- RESUBMIT: Limit corrections to items marked.
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- REJECTED; REVISE & RESUBMIT  
Fabrication and/or installation may NOT be undertaken.

Reviewed only for general conformance with project design concept and general compliance with the Contract Documents. Corrections or comments made in review do not relieve contractor from compliance with requirements of the contract documents. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: all dimensions; information pertaining to the fabrication process or to the means, methods, techniques, sequence and procedure of construction; coordination of work with other trades; and performing of work in safe and satisfactory manner.

Signed by: [Signature]  
Consultant/Department: Crife Architects + Engineers  
Date: 3/3/10



Architects + Engineers

**COMMENTS:**

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<b>Submittal Package</b>
<b>Project</b> [IPS-III-1015] - 015 - Thomas D. Gregg Elementary School <b>View Date</b> 2/17/2010

Enginuity Management & Consulting Corp.  
 Ste 230  
 6214 Morenci Trail  
 Indianapolis, IN 46268  
 Phone: 317-297-5601  
 Fax: 317-423-5460

**Submittal Package No.**  
 334600

**General Information**

<b>Package No.</b>	334600	<b>Package Revision</b>	0
<b>Description</b>	Subdrainage		
<b>Primary CSI Code</b>	33 46 00 - Subdrainage		
<b>Reviewers</b>	Jarrett, Roger (Durkin & Villalta Partners Engineering)		
<b>Primary Reviewer</b>	Roger Jarrett (Durkin & Villalta Partners Engineering)		
<b>Notes</b>			

**Items**

CSI Code	Item No./Rev.	Description	Submitting Company	Status	Primary Response
33 46 00	<u>00421.0</u>	Product Data	MacDougall Pierce Construction, Inc.	Requested from Prime	



**Campbell Land Development  
Construction Waste**  
935 West Troy Avenue  
Indianapolis, IN 46225  
Office: 317.783.1500  
Fax: 317.783.4860

Reviewed by WJB  
of Enginuity for  
CQM Team on  
02/18/2010

# SUBMITTAL

**Date:** February 9, 2010

**Project Name:** IPS Thomas D. Gregg Elementary School No. 15

**Architecture/Engineer:**  
Durkin & Villalta Partners Engineering  
8440 Woodfield Crossing Blvd., Suite 175  
Indianapolis, IN 46240

**Construction Quality Manager (CQM):**  
Garcia Construction Group  
6002 N. Michigan Road  
Indianapolis, IN 46228

**Contractor:**  
MacDougal Pierce  
12720 Ford Drive  
Fishers, IN 46038

**Subcontractor:**  
Campbell Land  
Development  
935 West Troy Ave.  
Indianapolis, IN 46225

**Supplier:**  
Midwest Construction  
Products  
3901 S. Madison Ave.  
Indianapolis, IN 46227

**Manufacturer:**  
Propex Geosynthetics  
6025 Lee Highway  
Chattanooga, TN 37422

**Unique identifier, including revision number** \_\_\_\_\_

**Number and title of appropriate Specification Section** 334600  
Subdrainage

**Drawing number and detail references, as appropriate** C603: ST-20

**Other necessary identification** Geotextile

# PRODUCT DATA SHEET

## GEOTEX<sup>®</sup> 401

GEOTEX 401 is a polypropylene, staple fiber, needlepunched nonwoven geotextile produced by Propex, and will meet the following Minimum Average Roll Values (MARV) when tested in accordance with the methods listed below. The fibers are needed to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils.

GEOTEX 401 conforms to the property values listed below.<sup>1</sup> Propex performs internal Manufacturing Quality Control (MQC) tests that have been accredited by the Geosynthetic Accreditation Institute - Laboratory Accreditation Program (GAI-LAP).

PROPERTY	TEST METHOD	ENGLISH	METRIC
<b>Mechanical</b>			
Tensile Strength (Grab)	ASTM D-4632	115 lbs	512 N
Elongation	ASTM D-4632	50%	50%
Puncture	ASTM D-4833	65 lbs	289 N
CBR Puncture	ASTM D-6241	310 lbs	1379 N
Mullen Burst	ASTM D-3786	210 psi	1448 kPa
Trapezoidal Tear	ASTM D-4533	50 lbs	222 N
<b>Endurance</b>			
UV Resistance	ASTM D-4355	70%	70%
<b>Hydraulic</b>			
Apparent Opening Size (AOS) <sup>3</sup>	ASTM D-4751	70 US Std. Sieve	0.212 mm
Permittivity	ASTM D-4491	2.0 sec <sup>-1</sup>	2.0 sec <sup>-1</sup>
Water Flow Rate	ASTM D-4491	140 gpm/ft <sup>2</sup>	5704 l/min/m <sup>2</sup>
Roll Sizes		12.5 ft x 360 ft	3.81 m x 109.8 m
		15 ft x 360 ft	4.57 m x 109.8 m

### NOTES:

- The property values listed above are effective 08/2006 and are subject to change without notice.
- Values shown are in weaker principal direction. Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.
- Maximum average roll value.

**PROPEX** | THE ADVANTAGE CREATORS™  
GEOSYNTHETICS

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