

|                                    |  |           |    |                       |                              |           |
|------------------------------------|--|-----------|----|-----------------------|------------------------------|-----------|
| Received: 04/13/2009               | Completed: 04/24/2009  | Letter: N | rb | P.O.#:                | Test Report #:               | 2-78157-0 |
| Client's Identification            | Style: Polytex. Content: HDPE. Width: 150". Finish: None. Weight: 7 oz.sq.yd. End Use: Sun Shades/Tension Membranes. |           |    |                       |                              |           |
| Tested For: <b>Steve Morenberg</b> | Poly Fab USA LLC<br>1601 N. Sepulveda Blvd., #392<br>Manhattan Beach, CA 90266                                       |           |    |                       | Key Test: NFPA 701-2004 TM#1 | 165       |
|                                    |  |           |    | Tel: 1-(440)-503-9056 | Ext:                         |           |
|                                    |  |           |    | Fax: 1-(310)-626-9639 |                              |           |

PC: 0.5H

TEST PERFORMED: NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films - 2004 Edition - Test Method #1

PRODUCT CONFIGURATION:  Single Layer;  Multi Layer

RESULTS REPORTED:  Initially;  After 3 dry cleanings;  After 5 launderings @ 160°F

RESULTS:

| Specimen # | Afterflame*<br>(seconds) | Flaming Drip<br>(seconds) | Weight Loss<br>(percent) | Flame Projects<br>Above Top<br>Of Specimen<br>(yes/no) |
|------------|--------------------------|---------------------------|--------------------------|--|
| 1          | 0                        | 0                         | 1.3                      | No   |
| 2          | 0                        | 0                         | 0.7                      | No   |
| 3          | 0                        | 0                         | 0.7                      | No   |
| 4          | 0                        | 0                         | 1.3                      | No   |
| 5          | 0                        | 0                         | 2.6                      | No   |
| 6          | 0                        | 0                         | 0.6                      | No   |
| 7          | 0                        | 0                         | 2.1                      | No   |
| 8          | 0                        | 0                         | 1.3                      | No   |
| 9          | 0                        | 0                         | 3.3                      | No   |
| 10         | 0                        | 0                         | 2.0                      | No   |
|            | Mean: 0                  | Mean: 0                   | Mean: 1.6                |  |

STATISTICAL VALUES: SD = 0.9      3 SD = 2.7      Mean + 3 SD = 4.3

ABBREVIATIONS USED: SD = Standard deviation.

APPROXIMATE WEIGHT OF MATERIAL (as measured by Govmark): 292 g/m<sup>2</sup>

PRECONDITIONING:  0.5 hr @ 220°F (Standard)  
 24 hrs @ 68±9°F (Alternate: Material shrinks/distorts @ 220°F)

CONVERSION FACTOR: g/m<sup>2</sup> ÷ 28.35 x .835 = oz/yd<sup>2</sup>

NOTE:  
1. All specimens prepared in the length direction.  
2. See addendum for individual specimen weights.

REMARKS: None.

|                                    |  |           |    |                       |                              |            |
|------------------------------------|--|-----------|----|-----------------------|------------------------------|------------|
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| Client's Identification            | Style: Polytex. Content: HDPE. Width: 150". Finish: None. Weight: 7 oz.sq.yd. End Use: Sun Shades/Tension Membranes. |           |    |                       |                              |            |
| Tested For: <b>Steve Morenberg</b> | Poly Fab USA LLC<br>1601 N. Sepulveda Blvd., #392<br>Manhattan Beach, CA 90266                                       |           |    |                       | Key Test: NFPA 701-2004 TM#1 | 165        |
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FAILURE CRITERIA: As cited by NFPA 701 - 2004 Edition Test Method #1 (see Comments on page 3)

| Afterflame | Flaming Drip (Mean) | Weight Loss (percent) |                     |
|------------|---------------------|-----------------------|---------------------|
|            |                     | Mean                  | Individual Specimen |
| *          | Exceeds 2 seconds   | Exceeds 40%           | Exceeds Mean + 3 SD |

CONCLUSION: Based on the Results on page 1 and the above Failure Criteria cited by NFPA 701 - 2004 Edition Test Method #1, the item tested:

Passes;  Fails;  Requires testing of 10 additional specimens  
 i.e. only one individual specimen failure was noted

REVISED FAILURE CRITERIA (see Comments on page 3):

| Afterflame | Flaming Drip (Mean) | Weight Loss |             | Flame Height (Individual Specimen) |
|------------|---------------------|-------------|-------------|------------------------------------|
|            |                     | Mean        | Ind. Spec.  |                                    |
| *          | Exceeds 2 seconds   | Exceeds 40% | Exceeds 50% | Projects above top of specimen     |

CONCLUSION: Based on the Results on page 1 and the above Revised Failure Criteria, the item tested:

Passes;  Fails;  Requires testing of 10 additional specimens  
 i.e. only one individual specimen failure was noted

\* Afterflame is required to be recorded; however, the NFPA document does not factor it into the Failure Criteria reporting requirements. It should be noted that excessive afterflames (15 seconds or more) could be cause for rejection by local fire authorities performing "match" field tests.

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified by NFPA 701 - 2004 Edition Test Method #1 with additional recording of flame height.

*Heather E. Robertson*

AUTHORIZED SIGNATURE  
 THE GOVMARK ORGANIZATION, INC. /mg

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MS. HEATHER ROBERTSON

APR 27 2009

|  |  |                  |                              |               |                                  |
|--|--|------------------|------------------------------|---------------|----------------------------------|
| <b>Received:</b> 04/13/2009  | <b>Completed:</b> 04/24/2009   | <b>Letter:</b> N | rb                           | <b>P.O.#:</b> | <b>Test Report #:</b> 2-78157-0- |
| <b>Client's Identification</b>   | Style: Polytex. Content: HDPE. Width: 150". Finish: None. Weight: 7 oz.sq.yd. End Use: Sun Shades/Tension Membranes. |                  |                              |               |                                  |
| <b>Tested For:</b> <b>Steve Morenberg</b>                                      | <b>Key Test:</b> NFPA 701-2004 TM#1  |                  |                              | 165           |                                  |
| Poly Fab USA LLC<br>1601 N. Sepulveda Blvd., #392<br>Manhattan Beach, CA 90266 |  |                  | <b>Tel:</b> 1-(440)-503-9056 | <b>Ext:</b>   |                                  |
|  |  |                  | <b>Fax:</b> 1-(310)-626-9639 |               |                                  |

**COMMENTS:**

The Govmark Org., Inc. has determined to establish failure criteria over and above the criteria spelled out in the NFPA document. The rationale for the "revised" criteria is as follows:

Weight Loss - Individual Specimen Failure:

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The NFPA 701 document, as written, provides for a statistical calculation which provides for retest and a potential failure if any individual value exceeds the mean by three standard deviations. Govmark is of the opinion that this cannot mathematically occur, i.e. no individual result is mathematically capable of exceeding the mean plus three standard deviations. Therefore, Govmark has established 50% as the absolute number for individual specimen criteria.

Individual Specimen - Flame Projects Above Top of Specimen:

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When NFPA introduced the weight loss criteria, this was hailed as a more objective measure of product performance over previous editions, which relied on visual measurements of fire degradation. Unforeseen were those products which are composed of finishes over substantially non burning substrates. Intense flaming of the finishes occurs without substantially reducing the total weight of the specimen that was tested. It is believed that similar behavior of the intensely burning surface finishes on products made from such material could result in the ignition of nearby combustibles.

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Client Name : PolyFab USA  
Addendum to Test Report # : 2-78157-0  
Test : NFPA 701

| <u>Specimen #</u> | <u>Weight Before Test ( g )</u> | <u>Weight After Test ( g )</u> | <u>Percent Weight Loss</u> |
|-------------------|---------------------------------|--------------------------------|----------------------------|
| 1                 | 15.10                           | 14.90                          | 1.3                        |
| 2                 | 14.80                           | 14.70                          | 0.7                        |
| 3                 | 14.90                           | 14.80                          | 0.7                        |
| 4                 | 15.40                           | 15.20                          | 1.3                        |
| 5                 | 15.10                           | 14.70                          | 2.6                        |
| 6                 | 15.50                           | 15.40                          | 0.6                        |
| 7                 | 14.60                           | 14.30                          | 2.1                        |
| 8                 | 15.20                           | 15.00                          | 1.3                        |
| 9                 | 15.10                           | 14.60                          | 3.3                        |
| 10                | 15.30                           | 15.00                          | 2.0                        |

Mean Percent Weight Loss : 1.6  
Standard Deviation : 0.9  
3 x Standard Deviation : 2.7  
Mean + 3 x Standard Deviation : 4.3

|                                    |   |           |    |                            |                |            |
|------------------------------------|---|-----------|----|----------------------------|----------------|------------|
| Received: 04/08/2009               | Completed: 04/17/2009   | Letter: G | rb | P.O.#:                     | Test Report #: | 2-78101-0- |
| Client's Identification            | Polytex. A Superior Fire Rated Knitted HDPE Shade Fabric Designed For Use In Modular Shade Structures And Shade Sails. 7 oz/sq.yd |           |    |                            |                |            |
| Tested For: <b>Steve Morenberg</b> | Poly Fab USA LLC<br>1601 N. Sepulveda Blvd., #392<br>Manhattan Beach, CA 90266  |           |    | Key Test: ASTM E 84 (BLDG) | 825            |            |
|                                    |   |           |    | Tel: 1-(440)-503-9056      | Ext:           |            |
|                                    |   |           |    | Fax: 1-(310)-626-9639      |                |            |

PC: ME /jd

TEST PERFORMED: ASTM E 84 - Standard Test Method for Surface Burning Characteristics of Building Materials \*

PRODUCT CATEGORY:  Textile Type Product  
 Vinyl Type Product  
 Other than Textile Type or Vinyl Type Product:

\* Note: Textile or expanded vinyl wallcoverings classified by this procedure are limited to use in sprinklered areas in certain public occupancies. If textile or expanded vinyl wallcoverings are used in non-sprinklered areas, a room/corner fire test is mandated, such as NFPA 265 for textiles and NFPA 286 for expanded vinyls.

NFPA 286 test method standard applies not only to expanded vinyls, but also to all non-textile products. Therefore, it should be considered for all interior finish applications in non-sprinklered areas.

SPECIMEN MOUNTING:

Adhered: The test specimen was bonded to three 1/4" IRC (Inorganic Reinforced Cement) boards (a cement asbestos substitute) to form a test specimen the face of which was 23" ± 1" x 24'.

Unadhered: The 23" ± 1" x 24' specimen was not adhered to any substrate. Instead, it was laid over a 2" hexagonal wire mesh screen and 1/4" rods.

RESULTS:

Flame Spread Index: 15

Smoke Developed: 25

REMARKS: None.

Received: 04/08/2009 Completed: 04/17/2009 Letter: G rb P.O.#: Test Report #: 2-78101-0-

Client's Identification: Polytex. A Superior Fire Rated Knitted HDPE Shade Fabric Designed For Use In Modular Shade Structures And Shade Sails. 7 oz/sq.yd

Tested For: **Steve Morenberg** Key Test: ASTM E 84 (BLDG) 825  
 Poly Fab USA LLC  
 1601 N. Sepulveda Blvd., #392 Tel: 1-(440)-503-9056 Ext:  
 Manhattan Beach, CA 90266 Fax: 1-(310)-626-9639

CONCLUSION: Based on the above Results and Code Classification System the item tested is assigned a:

Class I or A rating  
 Class II or B rating  
 Class III or C rating  
 Unrated

DATA SUMMARY:

Time to Ignition: 0.03 minutes  
 Maximum Flame Spread "Distance": 2.98 feet  
 Maximum Flame Spread "Time": 1.52 minutes

CODE CLASSIFICATION SYSTEM:

|                 | Flame Spread Index | Smoke Developed |
|-----------------|--------------------|-----------------|
| Class I or A:   | 0 - 25             | 450 or less     |
| Class II or B:  | 26 - 75            | 450 or less     |
| Class III or C: | 76 - 200           | 450 or less     |

- BUILDING CODE CITATION FOR THE CLASSIFICATION SCHEME:
- (1) 2006 edition, NFPA 101 Life Safety Code, para. 10.2.3.4
  - (2) 2006 edition, NFPA 5000 Building Construction & Safety Code, para. 10.3.2
  - (3) 2006 edition, International Building Code, para. 803.1

CERTIFICATION: I certify that the above results were obtained after testing specimens in accordance with the procedures and equipment specified by ASTM E 84.

*Heather E. Robertson*  
 AUTHORIZED SIGNATURE  
 THE GOVMARK ORGANIZATION, INC. CT / JB / MJ  
**MS. HEATHER ROBERTSON**  
**APR 21 2009**

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