



The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header @ 12

[List View](#)

General Information

Contact

Default Values

Discount

Document Information

Procurement Folder: 292140

SO Doc Code: CRFQ

Procurement Type: Central Master Agreement

SO Dept: 0803

Vendor ID: VS0000011569

SO Doc ID: DOT17000000058

Legal Name: ORAFOL Americas Inc

Published Date: 2/17/17

Alias/DBA:

Close Date: 3/16/17

Total Bid: \$0.00

Close Time: 13:30

Response Date: 03/15/2017

Status: Closed

Response Time: 9:05

Solicitation Description: REFLECTIVE SIGN SHEETING
& ASSOCIATED MATERIALS

Total of Header Attachments: 12

Total of All Attachments: 12



Purchasing Division
2019 Washington Street East
Post Office Box 50130
Charleston, WV 25305-0130

State of West Virginia
Solicitation Response

Proc Folder : 292140

Solicitation Description : REFLECTIVE SIGN SHEETING & ASSOCIATED MATERIALS

Proc Type : Central Master Agreement

Date issued	Solicitation Closes	Solicitation Response	Version
	2017-03-16 13:30:00	SR 0803 ESR03031700000004157	1

VENDOR

VS0000011569

ORAFOL Americas Inc

Solicitation Number: CRFQ 0803 DOT17000000058

Total Bid : \$0.00 Response Date: 2017-03-15 Response Time: 09:05:52

Comments: Please note all attachments for this bid.

FOR INFORMATION CONTACT THE BUYER

Mark A Atkins
(304) 558-2307
mark.a.atkins@wv.gov

Signature on File

FEIN #

DATE

All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Pricing shall be completed on Exhibit_A Pricing Page.	0.00000	EA	\$1.000000	\$0.00

Comm Code	Manufacturer	Specification	Model #
55121734			

Extended Description :	Note: Vendor shall use Exhibit_A Pricing Page(s) for bid pricing. If bidding online vendor must attach the pricing page and information attachment to their bid. See Section 18 of Instructions to Bidders for additional information.
------------------------	--

Comments: See attached spreadsheet for pricing information

CRFQ 0803 DOT1700000058
REQUEST FOR QUOTATION
Reflective Sign Sheeting & Associated Materials

- 8.4 Technical Assistance:** If awarded any Section of this Contract, the successful Vendor shall, upon request by any of the Agencies named in this Contract, provide technical assistance for the service of application equipment and instruction and training of Agency personnel in the proper application of the materials supplied. This may include, but shall not be limited to, calibration and troubleshooting of application equipment, training films, material application, screen printing, packaging, storage, and the proper use & handling of inks.
- 8.5 Contract Manager:** During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager: Kelly Selander
Telephone Number: J 860-676-7100
Fax Number: 800-654-7570
Email Address: Kelly.selander@orafol.com

NA

State of West Virginia

Not Applicable

VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with **West Virginia Code, §5A-3-37**. (Does not apply to construction contracts). **West Virginia Code, §5A-3-37**, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

1. Application is made for 2.5% vendor preference for the reason checked:

- ☐ Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; **or**,
☐ Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
☐ Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; **or**,
☐ Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; **or**,

2. Application is made for 2.5% vendor preference for the reason checked:

- ☐ Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; **or**,

3. Application is made for 2.5% vendor preference for the reason checked:

- ☐ Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; **or**,

4. Application is made for 5% vendor preference for the reason checked:

- ☐ Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; **or**,

5. Application is made for 3.5% vendor preference who is a veteran for the reason checked:

- ☐ Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; **or**,

6. Application is made for 3.5% vendor preference who is a veteran for the reason checked:

- ☐ Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.

7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with **West Virginia Code §5A-3-59 and **West Virginia Code of State Rules**.**

- ☐ Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: _____ Signed: _____

Date: _____ Title: _____

**Check any combination of preference consideration(s) indicated above, which you are entitled to receive.*

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Rebecca Cavazuti Sales & Marketing Coordinator
(Name, Title)
Rebecca Cavazuti Sales & Marketing Coordinator
(Printed Name and Title)
120 Darling Drive Avon CT 06001
(Address)
860-676-7100
(Phone Number) / (Fax Number)
rebecca.cavazuti@orafol.com
(email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

ORAFOL AMERICAS
(Company)
ARISTOTEUS MPOUGAS, DIRECTOR SALES & MARKETING
(Authorized Signature) (Representative Name, Title)
ARISTOTEUS MPOUGAS, DIRECTOR SALES
(Printed Name and Title of Authorized Representative)
3-24-2017
(Date)
860-676-7100
(Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division
PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: ORAFOL AMERICAS

Authorized Signature: [Signature] Date: 2/24/2017

State of CT

County of Hartford, to-wit:

Taken, subscribed, and sworn to before me this 24th day of February, 2017.

My Commission expires November 30, 2021.

AFFIX SEAL HERE

NOTARY PUBLIC

[Signature: Gabriela Kurasiowski]

Purchasing Affidavit (Revised 08/01/2015)



the United States of America
to the Secretary of the
Department of the Interior

Washington, D. C.
Dear Sir:

I am very pleased to
hear that you are
interested in the
proposed project.

The project is a
very important one
and I am sure that
it will be of great
benefit to the
people of the
United States.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

Very truly yours,
[Signature]

Enclosed for you are
the following documents
which I am sure will
be of great interest
to you.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

Very truly yours,
[Signature]

Enclosed for you are
the following documents
which I am sure will
be of great interest
to you.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

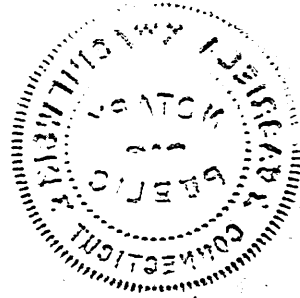
I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.

I am sure that you
will find the project
very interesting and
I am sure that you
will be very
satisfied with the
results.





ARTICLE SAFETY DATA SHEET

Disclaimer Statement:

The information contained herein is based on data taken from sources believed to be both current and accurate at the time of preparation. All ORAFOL brand retroreflective sheeting products are defined as articles under the Occupational Safety and Health Administration Hazard Communication (29CFR 1910.1200(b)(6)(v)) for which Safety Data Sheets are not required. This information has been provided solely as a customer service and should not be considered legally binding in any way.

SECTION 1 - Identification

Date of Preparation: 01 OCT 2015

1.1 Product Identification:

ORAFOL Retroreflective Sheeting Material (All Types)

1.2 Recommended Use:

This article is a retroreflective material for enhancement of safety through improved visibility to others.

1.3 Supplier Information:

ORAFOL Americas Inc., 120 Darling Drive, Avon, CT 06001 USA

1.4 Emergency Telephone Number:

(860) 676-7100

SECTION 2 – Hazard Identification

All ORAFOL brand retroreflective sheeting products are considered exempt from hazard classification according to OSHA Hazard Communication 29 CFR 1910.1200.

SECTION 3 - Composition

The exact composition identity and percentages by weight are withheld as trade secrets.

INGREDIENT	C.A.S Number	% By WEIGHT
PROPRIETARY POLYMERS/POLYMER BLENDS	None	40 - 100
PROPRIETARY COLORANTS	None	0 - 10
PROPRIETARY COATINGS	None	5 - 40



ARTICLE SAFETY DATA SHEET

SECTION 4 – First Aid

- 4.1 INHALATION:** Not necessary under recommended use.
- 4.2 SKIN CONTACT:** Not necessary under recommended use.
- 4.3 EYE CONTACT:** Not necessary under recommended use.
- 4.4 INGESTION:** Not necessary under recommended use.

SECTION 5 – Fire Fighting Information

In case of fire, material can be extinguished using any suitable method including water, CO₂, dry chemical, and foam.

SECTION 6 – Accidental Release

- 6.1 Emergency Procedures:** Not applicable.
- 6.2 Environmental Precautions:** Dispose of material of material off-cuts through normal local trash disposal methods.
- 6.3 Methods and Equipment for Containment and Clean up:** Not Applicable.

SECTION 7 – Handling & Storage

- 7.1 Safe Handling Precautions:** Article will not release hazardous chemicals under normal recommended use. Use gloves and safety glasses if needed to avoid mechanical injury.
- 7.2 Safe Storage Conditions:** Article will not release hazardous chemicals. Store article below 86° F (30° C) for best product shelf life.

SECTION 8 – Personal Protection Equipment

Article will not release hazardous chemicals so PPE not anticipated to be necessary under normal recommended use. Use gloves and safety glasses if needed to avoid mechanical injury.

SECTION 9 – Physical & Chemical Properties

Physical form: Solid	Evaporation Rate: not applicable
Odor: characteristic plastic odor	Flammable Limits (LEL/UEL): not applicable
pH: not applicable	Autoignition Temperature: not applicable
Melting point: not applicable	Decomposition Temperature: >200° C
Boiling point: not applicable	Vapor Pressure: not applicable
Flashpoint: not applicable	Solubility in Water: insoluble
Percent Volatile: 0%	



ARTICLE SAFETY DATA SHEET

SECTION 10 – Stability & Reactivity

Stable and not reactive in normal use conditions.

SECTION 11 – Toxicological Information

11.1 INHALATION: Not an anticipated exposure route.

11.2 SKIN CONTACT: No anticipated adverse health effects.

11.3 EYE CONTACT: No anticipated adverse health effects other than those associated with mechanical injury as a result of physical contact.

11.4 INGESTION: Not an anticipated exposure route.

There are no known health hazards as a result of contact during normal use of these articles.

SECTION 12 – Ecological/Environmental Information

There is no significant risk of a biological or ecological hazard being released from this article.

SECTION 13 – Disposal Requirements

Please dispose of in accordance with local trash regulations.

SECTION 14 – Transportation Information

No special shipping methodology or labeling is required. The user is responsible for compliance to applicable shipping regulations.

SECTION 15 – Regulatory Information

Articles by classification are exempt from TSCA and other chemical inventory reporting regulations. In compliance with California Proposition 65, WARNING: These products may contain substances known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – Other Information

NFPA HAZARD CLASSIFICATION: Health = 0, Flammability=1, Reactivity = 0, Special Hazards = None

EXHIBIT A - PRICING PAGES

Quantities listed in this RFQ are approximations only. It is understood and agreed that the contract shall cover the quantities actually ordered for delivery during the term of the contract, whether more or less than the quantities shown. Award will be based on lowest total cost.

SECTION I: Transfer Films								
Contract Item Number	Estimated Quantity	Item Description	Overage Preferences	Manufacturer Product Code	Unit Cost	Extended Total Amount (Qty x Unit Cost)	UNSPSC Commodity Code	DOH Inventory Subcode
1	1	Transfer Tape, Low Tack, 2 inch x 100 yds.	NA	ORATAPE LT72	6.46	\$ 6.46	55121734	-
2	1	Transfer Tape, Low Tack, 3 inch x 100 yds.	NA	ORATAPE LT72	9.69	\$ 9.69	55121734	-
3	1	Transfer Tape, Low Tack, 12 inch x 100 yds.	NA	ORATAPE LT72	38.75	\$ 38.75	55121734	-
4	1	Transfer Tape, Low Tack, 15 inch x 100 yds.	NA	ORATAPE LT72	48.41	\$ 48.41	55121734	-
5	6	Transfer Tape, Low Tack, 18 inch x 100 yds.	NA	ORATAPE LT72	58.12	\$ 348.72	55121734	-
6	5	Transfer Tape, Low Tack, 24 inch x 100 yds.	NA	ORATAPE LT72	77.49	\$ 387.45	55121734	-
7	19	Transfer Tape, Low Tack, 30 inch x 100 yds.	NA	ORATAPE LT72	96.81	\$ 1,839.39	55121734	-
8	6	Transfer Tape, Low Tack, 36 inch x 100 yds.	NA	ORATAPE LT72	116.25	\$ 697.50	55121734	-
9	1	Transfer Tape, Low Tack, 42 inch x 100 yds.	NA	ORATAPE LT72	135.63	\$ 135.63	55121734	-
10	7	Transfer Tape, Low Tack, 48 inch x 100 yds.	NA	ORATAPE LT72	155	\$ 1,085.00	55121734	-
SECTION II: Type ASTM-I Retroreflective Sheeting								
Contract Item Number	Estimated Quantity	Item Description	Overage Preferences	Manufacturer Product Code	Unit Cost	Extended Total Amount (Qty x Unit Cost)	UNSPSC Commodity Code	DOH Inventory Subcode
11	1	Type ASTM-I Sheeting, 15 inch x 50 yds., White	1/16" min. overage preferred	ORALITE 6700	129.3750	\$ 129.38	55121734	111015
12	1	Type ASTM-I Sheeting, 15 inch x 50 yds., Yellow	1/16" min. overage preferred	ORALITE 6700	129.3750	\$ 129.38	55121734	112015
13	1	Type ASTM-I Sheeting, 18-1/2 inch x 50 yds., White	-	ORALITE 6700	159.5625	\$ 159.56	55121734	-
14	1	Type ASTM-I Sheeting, 18-1/2 inch x 50 yds., Yellow	-	ORALITE 6700	159.5625	\$ 159.56	55121734	112018
15	1	Type ASTM-I Sheeting, 21 inch x 50 yds., White	1/16" min. overage preferred	ORALITE 6700	181.1250	\$ 181.13	55121734	111021
16	1	Type ASTM-I Sheeting, 21 inch x 50 yds., Yellow	1/16" min. overage preferred	ORALITE 6700	181.1250	\$ 181.13	55121734	-
17	8	Type ASTM-I Sheeting, 24-1/2 inch x 50 yds., White	-	ORALITE 6700	211.3125	\$ 1,690.50	55121734	111024
18	1	Type ASTM-I Sheeting, 24-1/2 inch x 50 yds., Yellow	-	ORALITE 6700	211.3125	\$ 211.31	55121734	112024
19	46	Type ASTM-I Sheeting, 30-1/2 inch x 50 yds., White	-	ORALITE 6700	263.2350	\$ 12,108.81	55121734	111030
20	2	Type ASTM-I Sheeting, 30-1/2 inch x 50 yds., Yellow	-	ORALITE 6700	263.0625	\$ 526.13	55121734	112030
21	4	Type ASTM-I Sheeting, 36 inch x 50 yds., White	5/16" min. overage preferred	ORALITE 6700	310.5000	\$ 1,242.00	55121734	111036
22	1	Type ASTM-I Sheeting, 36 inch x 50 yds., Yellow	5/16" min. overage preferred	ORALITE 6700	310.5000	\$ 310.50	55121734	112036
23	1	Type ASTM-I Sheeting, 42 inch x 50 yds., White	5/16" min. overage preferred	ORALITE 6700	362.2500	\$ 362.25	55121734	-
24	1	Type ASTM-I Sheeting, 42 inch x 50 yds., Yellow	5/16" min. overage preferred	ORALITE 6700	362.2500	\$ 362.25	55121734	-
25	5	Type ASTM-I Sheeting, 48 inch x 50 yds., White	7/16" min. overage preferred	ORALITE 6700	414.0000	\$ 2,070.00	55121734	111048
26	1	Type ASTM-I Sheeting, 48 inch x 50 yds., Yellow	7/16" min. overage preferred	ORALITE 6700	414.0000	\$ 414.00	55121734	112048
27	1	Type ASTM-I Sheeting, 1/2 inch x 50 yds., White	-	ORALITE 6700	4.3125	\$ 4.31	55121734	111050
28	1	Type ASTM-I Sheeting, 1/2 inch x 50 yds., Yellow	-	ORALITE 6700	4.3125	\$ 4.31	55121734	112050
29	1	Type ASTM-I Sheeting, 1 inch x 50 yds., White	-	ORALITE 6700	8.6250	\$ 8.63	55121734	111100
30	1	Type ASTM-I Sheeting, 1 inch x 50 yds., Yellow	-	ORALITE 6700	8.6250	\$ 8.63	55121734	112100

31	1	Type ASTM-I Sheeting, 15 inch x 50 yds., Blue	1/16" min. overage preferred	ORALITE 6700	129.3750	\$ 129.38	55121734	115015
32	1	Type ASTM-I Sheeting, 18-1/2 inch x 50 yds., Blue	-	ORALITE 6700	159.5625	\$ 159.56	55121734	-
33	1	Type ASTM-I Sheeting, 21 inch x 50 yds., Blue	1/16" min. overage preferred	ORALITE 6700	181.1250	\$ 181.13	55121734	-
34	2	Type ASTM-I Sheeting, 24-1/2 inch x 50 yds., Blue	-	ORALITE 6700	211.3125	\$ 422.63	55121734	115024
35	1	Type ASTM-I Sheeting, 30-1/2 inch x 50 yds., Blue	-	ORALITE 6700	263.0625	\$ 263.06	55121734	115030
36	1	Type ASTM-I Sheeting, 36 inch x 50 yds., Blue	3/16" min. overage preferred	ORALITE 6700	310.5000	\$ 310.50	55121734	115036
37	1	Type ASTM-I Sheeting, 42 inch x 50 yds., Blue	5/16" min. overage preferred	ORALITE 6700	362.2500	\$ 362.25	55121734	-
38	1	Type ASTM-I Sheeting, 48 inch x 50 yds., Blue	7/16" min. overage preferred	ORALITE 6700	414.0000	\$ 414.00	55121734	115048
SECTION III: Type ASTM-IV Retroreflective Sheeting								
Contract Item Number	Estimated Quantity	Item Description	Overage Preferences	Manufacturer Product Code	Unit Cost	Extended Total Amount (Qty x Unit Cost)	UNSPSC Commodity Code	DOH Inventory Subcode
39	1	Type ASTM-IV Sheeting, 1/2 inch x 50 yds., White	-	ORALITE 5900	4.7500	\$ 4.75	55121734	211050
40	1	Type ASTM-IV Sheeting, 1/2 inch x 50 yds., Yellow	-	ORALITE 5900	4.7500	\$ 4.75	55121734	-
41	1	Type ASTM-IV Sheeting, 1 inch x 50 yds., White	-	ORALITE 5900	9.5000	\$ 9.50	55121734	211100
42	1	Type ASTM-IV Sheeting, 1 inch x 50 yds., Yellow	-	ORALITE 5900	9.5000	\$ 9.50	55121734	-
43	1	Type ASTM-IV Sheeting, 12-3/4 inch x 100 yds., White	-	ORALITE 5900	121.1288	\$ 121.13	55121734	211012
44	1	Type ASTM-IV Sheeting, 12-3/4 inch x 100 yds., Yellow	-	ORALITE 5900	121.1288	\$ 121.13	55121734	212012
45	22	Type ASTM-IV Sheeting, 12-3/4 inch x 100 yds., Blue	-	ORALITE 5900	121.1288	\$ 2,664.83	55121734	215012
46	17	Type ASTM-IV Sheeting, 12-3/4 inch x 100 yds., Green	-	ORALITE 5900	121.1288	\$ 2,059.19	55121734	214012
47	1	Type ASTM-IV Sheeting, 12-3/4 inch x 100 yds., Brown	-	ORALITE 5900	121.1288	\$ 121.13	55121734	2016012
48	1	Type ASTM-IV Sheeting, 15 inch x 50 yds., White	1/16" min. overage preferred	ORALITE 5900	142.5000	\$ 142.50	55121734	211015
49	1	Type ASTM-IV Sheeting, 15 inch x 50 yds., Yellow	1/16" min. overage preferred	ORALITE 5900	142.5000	\$ 142.50	55121734	-
50	1	Type ASTM-IV Sheeting, 15 inch x 50 yds., Blue	1/16" min. overage preferred	ORALITE 5900	142.5000	\$ 142.50	55121734	215015
51	1	Type ASTM-IV Sheeting, 15 inch x 50 yds., Green	1/16" min. overage preferred	ORALITE 5900	142.5000	\$ 142.50	55121734	-
52	1	Type ASTM-IV Sheeting, 15 inch x 50 yds., Brown	1/16" min. overage preferred	ORALITE 5900	142.5000	\$ 142.50	55121734	-
53	13	Type ASTM-IV Sheeting, 18-1/2 inch x 50 yds., White	-	ORALITE 5900	175.7500	\$ 2,284.75	55121734	211018
54	1	Type ASTM-IV Sheeting, 18-1/2 inch x 50 yds., Yellow	-	ORALITE 5900	175.7500	\$ 175.75	55121734	212018
55	1	Type ASTM-IV Sheeting, 18-1/2 inch x 50 yds., Blue	-	ORALITE 5900	175.7500	\$ 175.75	55121734	-
56	1	Type ASTM-IV Sheeting, 18-1/2 inch x 50 yds., Green	-	ORALITE 5900	175.7500	\$ 175.75	55121734	-
57	1	Type ASTM-IV Sheeting, 18-1/2 inch x 50 yds., Brown	-	ORALITE 5900	175.7500	\$ 175.75	55121734	-
58	1	Type ASTM-IV Sheeting, 21 inch x 50 yds., White	1/16" min. overage preferred	ORALITE 5900	199.5000	\$ 199.50	55121734	211021
59	1	Type ASTM-IV Sheeting, 21 inch x 50 yds., Yellow	1/16" min. overage preferred	ORALITE 5900	199.5000	\$ 199.50	55121734	-
60	1	Type ASTM-IV Sheeting, 21 inch x 50 yds., Blue	1/16" min. overage preferred	ORALITE 5900	199.5000	\$ 199.50	55121734	-
61	1	Type ASTM-IV Sheeting, 21 inch x 50 yds., Green	1/16" min. overage preferred	ORALITE 5900	199.5000	\$ 199.50	55121734	-
62	1	Type ASTM-IV Sheeting, 21 inch x 50 yds., Brown	1/16" min. overage preferred	ORALITE 5900	199.5000	\$ 199.50	55121734	-
63	27	Type ASTM-IV Sheeting, 24-1/2 inch x 50 yds., White	-	ORALITE 5900	232.7500	\$ 6,284.25	55121734	211024
64	11	Type ASTM-IV Sheeting, 24-1/2 inch x 50 yds., Yellow	-	ORALITE 5900	232.7500	\$ 2,560.25	55121734	212024

65	1	Type ASTM-IV Sheeting, 24-1/2 inch x 50 yds., Blue	-	ORALITE 5900	232.7500	\$ 232.75	55121734	-
66	1	Type ASTM-IV Sheeting, 24-1/2 inch x 50 yds., Green	-	ORALITE 5900	232.7500	\$ 232.75	55121734	-
67	1	Type ASTM-IV Sheeting, 24-1/2 inch x 50 yds., Brown	-	ORALITE 5900	232.7500	\$ 232.75	55121734	216024
68	1	Type ASTM-IV Sheeting, 24-1/2 inch x 50 yds., Red	-	ORALITE 5900	232.7500	\$ 232.75	55121734	217024
69	73	Type ASTM-IV Sheeting, 30-1/2 inch x 50 yds., White	-	ORALITE 5900	289.7500	\$ 21,151.75	55121734	211030
70	49	Type ASTM-IV Sheeting, 30-1/2 inch x 50 yds., Yellow	-	ORALITE 5900	289.7500	\$ 14,197.75	55121734	212030
71	1	Type ASTM-IV Sheeting, 30-1/2 inch x 50 yds., Blue	-	ORALITE 5900	289.7500	\$ 289.75	55121734	215030
72	1	Type ASTM-IV Sheeting, 30-1/2 inch x 50 yds., Green	-	ORALITE 5900	289.7500	\$ 289.75	55121734	214030
73	1	Type ASTM-IV Sheeting, 30-1/2 inch x 50 yds., Brown	-	ORALITE 5900	289.7500	\$ 289.75	55121734	216030
74	16	Type ASTM-IV Sheeting, 36 inch x 50 yds., White	3/16" min. overage preferred	ORALITE 5900	342.0000	\$ 5,472.00	55121734	211036
75	20	Type ASTM-IV Sheeting, 36 inch x 50 yds., Yellow	3/16" min. overage preferred	ORALITE 5900	342.0000	\$ 6,840.00	55121734	212036
76	1	Type ASTM-IV Sheeting, 36 inch x 50 yds., Blue	3/16" min. overage preferred	ORALITE 5900	342.0000	\$ 342.00	55121734	215036
77	1	Type ASTM-IV Sheeting, 36 inch x 50 yds., Green	3/16" min. overage preferred	ORALITE 5900	342.0000	\$ 342.00	55121734	214036
78	1	Type ASTM-IV Sheeting, 36 inch x 50 yds., Brown	3/16" min. overage preferred	ORALITE 5900	342.0000	\$ 342.00	55121734	-
79	14	Type ASTM-IV Sheeting, 42 inch x 50 yds., White	5/16" min. overage preferred	ORALITE 5900	399.0000	\$ 5,586.00	55121734	211042
80	1	Type ASTM-IV Sheeting, 42 inch x 50 yds., Yellow	5/16" min. overage preferred	ORALITE 5900	399.0000	\$ 399.00	55121734	212042
81	1	Type ASTM-IV Sheeting, 42 inch x 50 yds., Blue	5/16" min. overage preferred	ORALITE 5900	399.0000	\$ 399.00	55121734	215042
82	1	Type ASTM-IV Sheeting, 42 inch x 50 yds., Green	5/16" min. overage preferred	ORALITE 5900	399.0000	\$ 399.00	55121734	214042
83	1	Type ASTM-IV Sheeting, 42 inch x 50 yds., Brown	5/16" min. overage preferred	ORALITE 5900	399.0000	\$ 399.00	55121734	-
84	15	Type ASTM-IV Sheeting, 48 inch x 50 yds., White	7/16" min. overage preferred	ORALITE 5900	456.0000	\$ 6,840.00	55121734	211048
85	6	Type ASTM-IV Sheeting, 48 inch x 50 yds., Yellow	7/16" min. overage preferred	ORALITE 5900	456.0000	\$ 2,736.00	55121734	212048
86	1	Type ASTM-IV Sheeting, 48 inch x 50 yds., Blue	7/16" min. overage preferred	ORALITE 5900	456.0000	\$ 456.00	55121734	215048
87	1	Type ASTM-IV Sheeting, 48 inch x 50 yds., Green	7/16" min. overage preferred	ORALITE 5900	456.0000	\$ 456.00	55121734	214048
88	1	Type ASTM-IV Sheeting, 48 inch x 50 yds., Brown	7/16" min. overage preferred	ORALITE 5900	456.0000	\$ 456.00	55121734	216048
SECTION IV : Type ASTM-XI Retroreflective Sheeting								
Contract Item Number	Estimated Quantity	Item Description	Overage Preferences	Manufacturer Product Code	Unit Cost	Extended Total Amount (Qty x Unit Cost)	UNSPSC Commodity Code	DOH Inventory Subcode
89	1	Type ASTM-XI Sheeting, 9 inch x 100 yds., Fluorescent Yellow Green	-	No Bid		\$ -	55121734	612409
90	1	Type ASTM-XI Sheeting, 12 inch x 100 yds., White	-	No Bid		\$ -	55121734	611012
91	1	Type ASTM-XI Sheeting, 12 inch x 100 yds., Fluorescent Yellow	-	No Bid		\$ -	55121734	612012
92	10	Type ASTM-XI Sheeting, 12-3/4 inch x 100 yds., White	-	No Bid		\$ -	55121734	611012
93	20	Type ASTM-XI Sheeting, 12-3/4 inch x 100 yds., Blue	-	No Bid		\$ -	55121734	-
94	20	Type ASTM-XI Sheeting, 12-3/4 inch x 100 yds., Green	-	No Bid		\$ -	55121734	614012
95	1	Type ASTM-XI Sheeting, 12-3/4 inch x 100 yds., Fluorescent Orange	-	No Bid		\$ -	55121734	613012
96	1	Type ASTM-XI Sheeting, 12-3/4 inch x 100 yds., Fluorescent Yellow	-	No Bid		\$ -	55121734	612012

97	1	Type ASTM-XI Sheeting, 12-3/4 inch x 100 yds., Fluorescent Yellow Green	-	No Bid	\$ -	55121734	612412
98	1	Type ASTM-XI Sheeting, 15 inch x 50 yds., White	1/16" min. overage preferred	No Bid	\$ -	55121734	-
99	1	Type ASTM-XI Sheeting, 15 inch x 50 yds., Blue	1/16" min. overage preferred	No Bid	\$ -	55121734	-
100	1	Type ASTM-XI Sheeting, 15 inch x 50 yds., Green	1/16" min. overage preferred	No Bid	\$ -	55121734	-
101	1	Type ASTM-XI Sheeting, 15 inch x 50 yds., Fluorescent Orange	1/16" min. overage preferred	No Bid	\$ -	55121734	-
102	1	Type ASTM-XI Sheeting, 15 inch x 50 yds., Fluorescent Yellow	1/16" min. overage preferred	No Bid	\$ -	55121734	-
103	1	Type ASTM-XI Sheeting, 15 inch x 50 yds., Fluorescent Yellow Green	1/16" min. overage preferred	No Bid	\$ -	55121734	-
104	1	Type ASTM-XI Sheeting, 18-1/2 inch x 50 yds., White	-	No Bid	\$ -	55121734	611018
105	1	Type ASTM-XI Sheeting, 18-1/2 inch x 50 yds., Blue	-	No Bid	\$ -	55121734	-
106	1	Type ASTM-XI Sheeting, 18-1/2 inch x 50 yds., Green	-	No Bid	\$ -	55121734	-
107	4	Type ASTM-XI Sheeting, 18-1/2 inch x 50 yds., Fluorescent Orange	-	No Bid	\$ -	55121734	613018
108	1	Type ASTM-XI Sheeting, 18-1/2 inch x 50 yds., Fluorescent Yellow	-	No Bid	\$ -	55121734	612018
109	1	Type ASTM-XI Sheeting, 18-1/2 inch x 50 yds., Fluorescent Yellow Green	-	No Bid	\$ -	55121734	612418
110	1	Type ASTM-XI Sheeting, 21 inch x 50 yds., White	1/16" min. overage preferred	No Bid	\$ -	55121734	-
111	1	Type ASTM-XI Sheeting, 21 inch x 50 yds., Blue	1/16" min. overage preferred	No Bid	\$ -	55121734	-
112	1	Type ASTM-XI Sheeting, 21 inch x 50 yds., Green	1/16" min. overage preferred	No Bid	\$ -	55121734	-
113	1	Type ASTM-XI Sheeting, 21 inch x 50 yds., Fluorescent Orange	1/16" min. overage preferred	No Bid	\$ -	55121734	-
114	1	Type ASTM-XI Sheeting, 21 inch x 50 yds., Fluorescent Yellow	1/16" min. overage preferred	No Bid	\$ -	55121734	-
115	1	Type ASTM-XI Sheeting, 21 inch x 50 yds., Fluorescent Yellow Green	1/16" min. overage preferred	No Bid	\$ -	55121734	-
116	1	Type ASTM-XI Sheeting, 24-1/2 inch x 50 yds., White	-	No Bid	\$ -	55121734	611024
117	1	Type ASTM-XI Sheeting, 24-1/2 inch x 50 yds., Blue	-	No Bid	\$ -	55121734	-
118	1	Type ASTM-XI Sheeting, 24-1/2 inch x 50 yds., Green	-	No Bid	\$ -	55121734	-
119	4	Type ASTM-XI Sheeting, 24-1/2 inch x 50 yds., Fluorescent Orange	-	No Bid	\$ -	55121734	613024
120	14	Type ASTM-XI Sheeting, 24-1/2 inch x 50 yds., Fluorescent Yellow	-	No Bid	\$ -	55121734	612024
121	1	Type ASTM-XI Sheeting, 24-1/2 inch x 50 yds., Fluorescent Yellow Green	-	No Bid	\$ -	55121734	612424
122	1	Type ASTM-XI Sheeting, 30-1/2 inch x 50 yds., White	-	No Bid	\$ -	55121734	-
123	1	Type ASTM-XI Sheeting, 30-1/2 inch x 50 yds., Blue	-	No Bid	\$ -	55121734	-
124	1	Type ASTM-XI Sheeting, 30-1/2 inch x 50 yds., Green	-	No Bid	\$ -	55121734	-
125	2	Type ASTM-XI Sheeting, 30-1/2 inch x 50 yds., Fluorescent Orange	-	No Bid	\$ -	55121734	613030

126	6	Type ASTM-XI Sheeting, 30-1/2 inch x 50 yds., Fluorescent Yellow	-	No Bid		\$ -	55121734	612030
127	7	Type ASTM-XI Sheeting, 30-1/2 inch x 50 yds., Fluorescent Yellow Green	-	No Bid		\$ -	55121734	612430
128	1	Type ASTM-XI Sheeting, 36 inch x 50 yds., White	3/16" min. overage preferred	No Bid		\$ -	55121734	611036
129	1	Type ASTM-XI Sheeting, 36 inch x 50 yds., Blue	5/16" min. overage preferred	No Bid		\$ -	55121734	-
130	1	Type ASTM-XI Sheeting, 36 inch x 50 yds., Green	5/16" min. overage preferred	No Bid		\$ -	55121734	-
131	2	Type ASTM-XI Sheeting, 36 inch x 50 yds., Fluorescent Orange	3/16" min. overage preferred	No Bid		\$ -	55121734	613036
132	22	Type ASTM-XI Sheeting, 36 inch x 50 yds., Fluorescent Yellow	5/16" min. overage preferred	No Bid		\$ -	55121734	612036
133	1	Type ASTM-XI Sheeting, 36 inch x 50 yds., Fluorescent Yellow Green	5/16" min. overage preferred	No Bid		\$ -	55121734	612436
134	1	Type ASTM-XI Sheeting, 42 inch x 50 yds., White	5/16" min. overage preferred	No Bid		\$ -	55121734	-
135	1	Type ASTM-XI Sheeting, 42 inch x 50 yds., Blue	5/16" min. overage preferred	No Bid		\$ -	55121734	-
136	1	Type ASTM-XI Sheeting, 42 inch x 50 yds., Green	5/16" min. overage preferred	No Bid		\$ -	55121734	-
137	1	Type ASTM-XI Sheeting, 42 inch x 50 yds., Fluorescent Orange	5/16" min. overage preferred	No Bid		\$ -	55121734	-
138	1	Type ASTM-XI Sheeting, 42 inch x 50 yds., Fluorescent Yellow	5/16" min. overage preferred	No Bid		\$ -	55121734	-
139	1	Type ASTM-XI Sheeting, 42 inch x 50 yds., Fluorescent Yellow Green	5/16" min. overage preferred	No Bid		\$ -	55121734	-
140	11	Type ASTM-XI Sheeting, 48 inch x 50 yds., White	7/16" min. overage preferred	No Bid		\$ -	55121734	611048
141	2	Type ASTM-XI Sheeting, 48 inch x 50 yds., Blue	7/16" min. overage preferred	No Bid		\$ -	55121734	-
142	2	Type ASTM-XI Sheeting, 48 inch x 50 yds., Green	7/16" min. overage preferred	No Bid		\$ -	55121734	-
143	25	Type ASTM-XI Sheeting, 48 inch x 50 yds., Fluorescent Orange	7/16" min. overage preferred	No Bid		\$ -	55121734	613048
144	8	Type ASTM-XI Sheeting, 48 inch x 50 yds., Fluorescent Yellow	7/16" min. overage preferred	No Bid		\$ -	55121734	612048
145	11	Type ASTM-XI Sheeting, 48 inch x 50 yds., Fluorescent Yellow Green	7/16" min. overage preferred	No Bid		\$ -	55121734	612448
SECTION V : Type ASTM-I, ASTM-IV, and Type ASTM-XI Retroreflective Sheeting Matched Components								
Contract Item Number	Estimated Quantity	Item Description	Overage Preferences	Manufacturer Product Code	Unit Cost	Extended Total Amount (Qty x Unit Cost)	UNSPSC Commodity Code	DOH Inventory Subcode
146	1	Transparent film, Acrylic, 12 inch x 50 yds., Yellow	NA	ORALITE 5061	99.0000	\$ 99.00	55121734	-
147	1	Transparent film, Acrylic, 12 inch x 50 yds., Red	NA	ORALITE 5061	99.0000	\$ 99.00	55121734	-
148	1	Transparent film, Acrylic, 12 inch x 50 yds., Blue	NA	ORALITE 5061	99.0000	\$ 99.00	55121734	-
149	1	Transparent film, Acrylic, 12 inch x 50 yds., Green	NA	ORALITE 5061	99.0000	\$ 99.00	55121734	-
150	1	Transparent film, Acrylic, 12 inch x 50 yds., Brown	NA	ORALITE 5061	99.0000	\$ 99.00	55121734	-
151	1	Transparent film, Acrylic, 15 inch x 50 yds., Yellow	NA	ORALITE 5061	123.7500	\$ 123.75	55121734	-
152	1	Transparent film, Acrylic, 15 inch x 50 yds., Red	NA	ORALITE 5061	123.7500	\$ 123.75	55121734	-
153	1	Transparent film, Acrylic, 15 inch x 50 yds., Blue	NA	ORALITE 5061	123.7500	\$ 123.75	55121734	-

154	1	Transparent film, Acrylic, 15 inch x 50 yds., Green	NA	ORALITE 5061	123.7500	\$ 123.75	55121734	-
155	1	Transparent film, Acrylic, 15 inch x 50 yds., Brown	NA	ORALITE 5061	123.7500	\$ 123.75	55121734	-
156	1	Transparent film, Acrylic, 18 inch x 50 yds., Yellow	NA	ORALITE 5061	148.5000	\$ 148.50	55121734	-
157	1	Transparent film, Acrylic, 18 inch x 50 yds., Red	NA	ORALITE 5061	148.5000	\$ 148.50	55121734	-
158	1	Transparent film, Acrylic, 18 inch x 50 yds., Blue	NA	ORALITE 5061	148.5000	\$ 148.50	55121734	-
159	1	Transparent film, Acrylic, 18 inch x 50 yds., Green	NA	ORALITE 5061	148.5000	\$ 148.50	55121734	904018
160	1	Transparent film, Acrylic, 18 inch x 50 yds., Brown	NA	ORALITE 5061	148.5000	\$ 148.50	55121734	906018
161	1	Transparent film, Acrylic, 24 inch x 50 yds., Yellow	NA	ORALITE 5061	198.0000	\$ 198.00	55121734	902024
162	1	Transparent film, Acrylic, 24 inch x 50 yds., Red	NA	ORALITE 5061	198.0000	\$ 198.00	55121734	907024
163	1	Transparent film, Acrylic, 24 inch x 50 yds., Blue	NA	ORALITE 5061	198.0000	\$ 198.00	55121734	905024
164	11	Transparent film, Acrylic, 24 inch x 50 yds., Green	NA	ORALITE 5061	198.0000	\$ 2,178.00	55121734	904024
165	1	Transparent film, Acrylic, 24 inch x 50 yds., Brown	NA	ORALITE 5061	198.0000	\$ 198.00	55121734	906024
166	1	Transparent film, Acrylic, 30 inch x 50 yds., Yellow	NA	ORALITE 5061	247.5000	\$ 247.50	55121734	-
167	1	Transparent film, Acrylic, 30 inch x 50 yds., Red	NA	ORALITE 5061	247.5000	\$ 247.50	55121734	907030
168	1	Transparent film, Acrylic, 30 inch x 50 yds., Blue	NA	ORALITE 5061	247.5000	\$ 247.50	55121734	905030
169	29	Transparent film, Acrylic, 30 inch x 50 yds., Green	NA	ORALITE 5061	247.5000	\$ 7,177.50	55121734	904030
170	1	Transparent film, Acrylic, 30 inch x 50 yds., Brown	NA	ORALITE 5061	247.5000	\$ 247.50	55121734	906030
171	1	Transparent film, Acrylic, 36 inch x 50 yds., Yellow	NA	ORALITE 5061	297.0000	\$ 297.00	55121734	902036
172	1	Transparent film, Acrylic, 36 inch x 50 yds., Red	NA	ORALITE 5061	297.0000	\$ 297.00	55121734	907036
173	1	Transparent film, Acrylic, 36 inch x 50 yds., Blue	NA	ORALITE 5061	297.0000	\$ 297.00	55121734	905036
174	7	Transparent film, Acrylic, 36 inch x 50 yds., Green	NA	ORALITE 5061	297.0000	\$ 2,079.00	55121734	904036
175	1	Transparent film, Acrylic, 36 inch x 50 yds., Brown	NA	ORALITE 5061	297.0000	\$ 297.00	55121734	906036
176	1	Transparent film, Acrylic, 42 inch x 50 yds., Yellow	NA	ORALITE 5061	346.5000	\$ 346.50	55121734	-
177	1	Transparent film, Acrylic, 42 inch x 50 yds., Red	NA	ORALITE 5061	346.5000	\$ 346.50	55121734	-
178	1	Transparent film, Acrylic, 42 inch x 50 yds., Blue	NA	ORALITE 5061	346.5000	\$ 346.50	55121734	-
179	1	Transparent film, Acrylic, 42 inch x 50 yds., Green	NA	ORALITE 5061	346.5000	\$ 346.50	55121734	904042
180	1	Transparent film, Acrylic, 42 inch x 50 yds., Brown	NA	ORALITE 5061	346.5000	\$ 346.50	55121734	-
181	1	Transparent film, Acrylic, 48 inch x 50 yds., Yellow	NA	ORALITE 5061	396.0000	\$ 396.00	55121734	-
182	10	Transparent film, Acrylic, 48 inch x 50 yds., Red	NA	ORALITE 5061	396.0000	\$ 3,960.00	55121734	907048
183	11	Transparent film, Acrylic, 48 inch x 50 yds., Blue	NA	ORALITE 5061	396.0000	\$ 4,356.00	55121734	905048
184	10	Transparent film, Acrylic, 48 inch x 50 yds., Green	NA	ORALITE 5061	396.0000	\$ 3,960.00	55121734	904048
185	2	Transparent film, Acrylic, 48 inch x 50 yds., Brown	NA	ORALITE 5061	396.0000	\$ 792.00	55121734	906048
186	1	Opaque film, Vinyl, 3/8 inch x 50 yds., Black	NA	No Bid		\$ -	55121734	518038
187	1	Opaque film, Vinyl, 5/8 inch x 50 yds., Black	NA	No Bid		\$ -	55121734	518062
188	1	Opaque film, Vinyl, 3/4 inch x 50 yds., Black	NA	No Bid		\$ -	55121734	518075
189	1	Opaque film, Vinyl, 7/8 inch x 50 yds., Black	NA	No Bid		\$ -	55121734	518088

190	100	Opaque film, Vinyl, 1-1/4 inch x 50 yds., Black	NA	No Bid		\$ -	55121734	518125
191	1	Opaque film, Vinyl, 18 inch x 50 yds., Matte White	NA	ORALITE 651/751	123.7500	\$ 123.75	55121734	-
192	1	Opaque film, Vinyl, 18 inch x 50 yds., Black	NA	ORALITE 651/751	123.7500	\$ 123.75	55121734	-
193	1	Opaque film, Vinyl, 18 inch x 50 yds., Yellow	NA	ORALITE 651/751	137.2500	\$ 137.25	55121734	-
194	1	Opaque film, Vinyl, 18 inch x 50 yds., Blue	NA	ORALITE 651/751	137.2500	\$ 137.25	55121734	-
195	1	Opaque film, Vinyl, 24 inch x 50 yds., Matte White	NA	ORALITE 651/751	165.0000	\$ 165.00	55121734	-
196	1	Opaque film, Vinyl, 24 inch x 50 yds., Black	NA	ORALITE 651/751	165.0000	\$ 165.00	55121734	518024
197	1	Opaque film, Vinyl, 24 inch x 50 yds., Yellow	NA	ORALITE 651/751	183.0000	\$ 183.00	55121734	-
198	1	Opaque film, Vinyl, 24 inch x 50 yds., Blue	NA	ORALITE 651/751	183.0000	\$ 183.00	55121734	-
199	1	Opaque film, Vinyl, 30 inch x 50 yds., Matte White	NA	ORALITE 651/751	206.2500	\$ 206.25	55121734	-
200	4	Opaque film, Vinyl, 30 inch x 50 yds., Black	NA	ORALITE 651/751	206.2500	\$ 825.00	55121734	518030
201	1	Opaque film, Vinyl, 30 inch x 50 yds., Yellow	NA	ORALITE 651/751	228.7500	\$ 228.75	55121734	512030
202	1	Opaque film, Vinyl, 30 inch x 50 yds., Blue	NA	ORALITE 651/751	228.7500	\$ 228.75	55121734	-
203	1	Opaque film, Vinyl, 36 inch x 50 yds., Matte White	NA	ORALITE 651/751	247.5000	\$ 247.50	55121734	-
204	4	Opaque film, Vinyl, 36 inch x 50 yds., Black	NA	ORALITE 651/751	247.5000	\$ 990.00	55121734	518036
205	1	Opaque film, Vinyl, 36 inch x 50 yds., Yellow	NA	ORALITE 651/751	274.5000	\$ 274.50	55121734	512036
206	1	Opaque film, Vinyl, 36 inch x 50 yds., Blue	NA	ORALITE 651/751	274.5000	\$ 274.50	55121734	-
207	1	Opaque film, Vinyl, 48 inch x 50 yds., Matte White	NA	ORALITE 651/751	330.0000	\$ 330.00	55121734	-
208	29	Opaque film, Vinyl, 48 inch x 50 yds., Black	NA	ORALITE 651/751	330.0000	\$ 9,570.00	55121734	518048
209	1	Opaque film, Vinyl, 48 inch x 50 yds., Yellow	NA	ORALITE 651/751	366.0000	\$ 366.00	55121734	-
210	1	Opaque film, Vinyl, 48 inch x 50 yds., Blue	NA	ORALITE 651/751	366.0000	\$ 366.00	55121734	-
211	1	Opaque film, Vinyl, 60 inch x 50 yds., Matte White	NA	ORALITE 651/751	412.5000	\$ 412.50	55121734	-
212	1	Opaque film, Vinyl, 60 inch x 50 yds., Black	NA	ORALITE 651/751	412.5000	\$ 412.50	55121734	-
213	1	Opaque film, Vinyl, 60 inch x 50 yds., Yellow	NA	ORALITE 651/751	457.5000	\$ 457.50	55121734	-
214	1	Opaque film, Vinyl, 60 inch x 50 yds., Blue	NA	ORALITE 651/751	457.5000	\$ 457.50	55121734	-
BID TOTAL						\$	162,697.66	

ORACAL® 751C

HIGH PERFORMANCE CAST FILM

Technical Datasheet
01/15
Page 1 of 1

Description

2-mil, high performance PVC film with excellent dimensional stability and very good cutting and application characteristics. Available in 78 vivid colors plus transparent, matte white and matte black.

Release Liner

84# custom silicone coated paper with special release characteristics that provide excellent weeding and release values. Customized blue silicone paper liner for matte and gloss white provides superior contrast for weeding.

Adhesive

Clear, solvent-based, permanent adhesive

Area of Use

Ideal for lettering, marking and decoration with high requirements for durability and conformability. Particularly suitable for high quality vehicle and fleet graphics.

Technical Data

Thickness (without liner and adhesive)	2-mil
Dimensional Stability (FINAT TM-14)	Adhered to steel, no shrinkage in cross direction; In length, <.006"
Temperature Resistance	Adhered to aluminum, -58°F to +230°F, no variation
Fire Behavior (DIN 75200) Fire Rating	Adhered to steel, self-extinguishing ASTM E 84-07 Class "A"
Adhesive Power (FINAT TM-1, after 24 h, average)	Adhered to stainless steel: 4.1 lb/in
Tensile Strength (DIN EN ISO 527)	Along: Min. 19 MPa Across: Min. 19 MPa
Elongation at Break (DIN EN ISO 527)	Along: Min. 120% Across: Min. 120%
Seawaterability (DIN 50 021)	Adhered to aluminum, after 100h/73°F, no variation
Shelf Life (68°F/50% relative humidity)	2 years
Minimum Life Expectancy (based on accepted application procedures on vertical surfaces)	8 years – black and white / 7 years – colors/transparent 5 years – metallic / 3 years – gold L, brilliant blue L
Minimum Application Temperature	46°F (dry application)
Available Lengths Available Widths	150' (50 yard) and 30' (10-yard) 15" (punched), 24", 30", 36" (transparent, black and white only), 40" (transparent and white only), 48"
Print Compatibility	Thermal transfer (gloss finish only)

Note

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. Films with structured surface are naturally more sensitive than the unstructured. Accordingly, these films are to be treated carefully both in processing and in cleaning. Impurities affect the appearance of structured films and require more frequent cleaning. Furthermore the application information published by ORAFOL is to be considered. The batch traceability according to ISO 9001 is possible on the basis of the roll number.

IMPORTANT NOTICE

All ORACAL® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORACAL® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORACAL® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use.

All specifications are subject to change without prior notice.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570
techsupport-americas@orafol.com

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H 6X5
Phone: 888.727.3374

www.orafolamericas.com

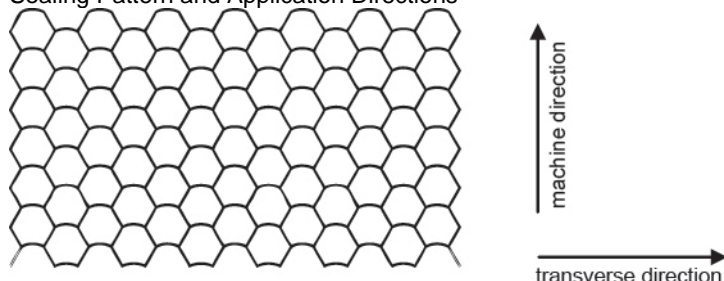
Description

ORALITE® 5900 High Intensity Prismatic Grade is highly reflective, weatherproof, self-adhesive sheeting with excellent corrosion and solvent resistance for the manufacture of durable permanent outdoor signing. The smooth surface of the film allows for high quality printability.

Product Construction

ORALITE® 5900 consists of sealed cells of air backed microprisms, using total internal reflection. The distinct shape of the sealing identifies the machine direction and the manufacturer of the sheeting (see drawing).

Sealing Pattern and Application Directions



Reflectivity

ORALITE® 5900 meets and/or exceeds the minimum coefficient of retroreflection (R_A) shown in Table 1 when tested in accordance with ASTM E810, "Standard Test Method for Coefficient of Retroreflection of Retroreflective Sheeting Utilizing the Coplanar Geometry". ORALITE® 5900 fully meets and/or exceeds the requirements of ASTM D4956 for Types III and IV and AASHTO M268 Type B.

Daytime Color

ORALITE® 5900 High Intensity Prismatic Grade conforms to the daytime color requirements in Table 2 when tested in accordance with ASTM D4956. Available in white, yellow, orange, green, red, blue, and brown.

Nighttime Color

ORALITE® 5900 conforms to the nighttime color requirements in Table 3 when tested in accordance with ASTM D4956 and ASTM E811. The sheeting shall be measured using CIE illuminant A, an observation angle of 0.33° and an entrance angle of $+5^\circ$.

Adhesive

The adhesive is protected by a release liner which shall be removed by peeling, without soaking in water or other solvents. The adhesive produces such a bond that a 1" (50 mm) strip shall support a 1 3/4 pound (0.79 kg) weight for 5 minutes without the strip peeling for a distance of more than 2" (50 mm) when applied to a smooth aluminum surface as specified in the ASTM D4956, section 7.5 adhesion test.

Impact Resistance

Following application to a smooth surface aluminum rectangle, 0.040" x 3" x 6" [1.01mm x 75mm x 150mm], the specimen is conditioned for 24 hours at $73^\circ \pm 3^\circ\text{F}$ ($23^\circ \pm 2^\circ\text{C}$) and 50% relative humidity, subject the sheeting to an impact of a 2 lb (0.91 kg) weight with a 5/8" (16 mm) rounded tip dropped from a 10 in-lb (1.13 N-m) setting on a Gardner variable impact tester, IG-1120, as per ASTM D4956, section S2.2.1. The sheeting shall show no cracking or delamination outside the actual area of impact.

Flexibility

The sheeting is conditioned for 24 hours at 72°F [23°C] and 50% relative humidity. The release liner is removed and the sheeting is sufficiently flexible to show no cracking when bent in one second's time around a 1/8-inch [3.2mm] diameter mandrel with the adhesive contacting the mandrel.

Weatherability

ORALITE® 5900 meets the requirements of ASTM D4956, Section 6.4. The material is weather resistant and shows no appreciable cracking, scaling, pitting, blistering, edge lifting, or curling, or more than 1/32" (0.8 mm) shrinkage or expansion. Retroreflectivity measurements are conducted after outdoor weathering with an observation angle of 0.20° and entrance angles of -4° and $+30^\circ$. The minimum coefficient of retroreflection (R_A) after weathering is 80% of the values specified in Table 1.



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H
6X5
Phone: 888.727.3374

techsupport-americas@orafol.com - www.orafolamericas.com

ORALITE® 5900

High Intensity Prismatic Grade

Technical Datasheet
07/16
Page 2 of 3

Solvent Resistance

ORALITE® 5900 meets the requirements of LS-300C solvent resistance, section 3.6.7, when tested as specified in Table VI, test method 4.4.6.

Specular Gloss

ORALITE® 5900 shall have a specular gloss of not less than 40 when tested in accordance with ASTM D523 at an angle of 85°.

Shrinkage

A 9 inch by 9 inch [229mm by 229mm] specimen of the sheeting with liner is conditioned a minimum of one hour at 72°F [23°C] and 50% relative humidity. The liner is then removed and the specimen is placed on a flat surface with the adhesive side up. Ten minutes after the liner is removed and again after 24 hours, the specimen is measured to determine the amount of dimensional change. The specimen will not shrink in any dimension more than 1/32 inch [0.8mm] in 10 minutes and 1/8 inch [3.2mm] in 24 hours.

Application Instructions

It is recommended that the application temperature to achieve best results is 65°F [18°C] or above.

Warranty

10 year limited warranty (3 years - Orange #035)
Contact your ORAFOL Americas Inc. representative for details.

Table 1, Coefficient of Retroreflection (R_A)*

Observation Angle	Entrance Angle	White	Yellow	Orange	Green	Red	Blue	Brown
0.20°	-4°	360	270	145	50	65	30	18
	30°	170	135	68	25	30	14	8.5
0.50°	-4°	150	110	60	21	27	13	7.5
	30°	72	54	28	10	13	6	3.5

*all values have units of cd/ft² (cd/lx/m²)

Table 2, Color Specification Limits (Daytime)

Color	Chromaticity Coordinates†								Luminance Factor (Y%)	
	1		2		3		4		Min.	Max.
	x	y	x	y	x	y	x	y		
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	≥ 27	
Yellow	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472	15	45
Orange	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5	15
Green	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	10	30
Red	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216	1.0	10
Blue	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771	3.0	12
Brown	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390	1.0	9.0

†The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant D65.



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H
6X5
Phone: 888.727.3374

techsupport-americas@orafol.com - www.orafolamericas.com

Table 3, Color Specification Limits (Nighttime)

Color	Chromaticity Coordinates‡							
	1		2		3		4	
	x	y	x	y	x	y	x	y
White	0.475	0.452	0.360	0.415	0.392	0.370	0.515	0.409
Yellow	0.513	0.487	0.500	0.470	0.545	0.425	0.572	0.425
Orange	0.595	0.405	0.565	0.405	0.613	0.355	0.643	0.355
Green	0.007	0.570	0.200	0.500	0.322	0.590	0.193	0.782
Red	0.650	0.348	0.620	0.348	0.712	0.255	0.735	0.265
Blue	0.033	0.370	0.180	0.370	0.230	0.240	0.091	0.133
Brown	0.595	0.405	0.540	0.405	0.570	0.365	0.643	0.355

‡ The four pairs of chromaticity coordinates determine the acceptable color in terms of the CIE 1931 Standard Colorimetric System measured with Standard Illuminant A.

Note:

All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

IMPORTANT NOTICE

When using ORALITE® sheeting, please comply with relevant national specifications. ORAFOL recommends obtaining the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable, although, such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure respectively. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The self adhesive reflective material can only be used for dry application. The low tensile strength of the material can make the removability of the reflective film more difficult. Please review applicable application information published by ORAFOL.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at www.orafolamericas.com for detailed information.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

ORALITE ® is a trademark of ORAFOL Europe GmbH



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H
6X5
Phone: 888.727.3374

techsupport-americas@orafol.com - www.orafolamericas.com

Product Description

ORALITE® retroreflective films series 6700 Engineer Prismatic Grade are flexible, weatherproof, self-adhesive films with excellent corrosion and solvent resistance. The product was specifically developed for the manufacture of traffic control, guidance, warning and information signs, which are intended for long term vertical outdoor use.

ORALITE® 6700 sheeting is composed of a UV stabilised acrylic front film. Its retroreflective system consists of sealed cells of air backed microprisms, using total internal reflection. The distinct shape of the sealing pattern identifies the machine direction and the manufacturer of the sheeting shown in Figure 1.

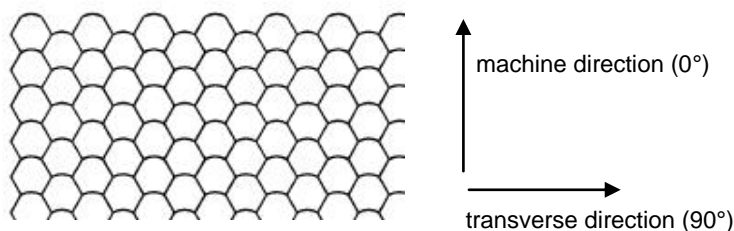
Retroreflectivity

ORALITE® 6700 exceeds the minimum performance requirements of DIN EN 12899-1 (class R1), DIN 67520:2013-10 (RA1; design C) and ASTM D4956-13 (type I sheeting). The required minimum retroreflection values, shown in Tables 1 and 2, are complied with when measured in accordance with the corresponding specifications using CIE standard illuminant A, and the provisions of CIE No.54.2.

Colour

ORALITE® 6700 sheeting is available in white (010), yellow (020), orange (035), red (030), green (060), blue (050) and brown (080). The sheeting conforms to the daytime colour requirements in Tables 3 and 4 when measured in accordance with the corresponding specifications, the provisions of CIE No. 15.2, and shall comply with the specifications of DIN 6171:2013-10 and ASTM D4956-13.

Figure 1 - Sealing pattern and application directions



Adhesive

The adhesive consists of a solvent polyacrylate, permanent pressure sensitive adhesive specially formulated for the application to metallic surfaces such as aluminium and zinc coated steel plate. The adhesive is protected by a release liner made of polypropylene film, silicone coated on one side, 0.075 mm [0.003"] thickness.

Application/Processing

ORALITE® 6700 was especially developed for traffic control applications. Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. For other applications the user is fully responsible for evaluating the suitability of the product, and for any risks associated with that use.

ORALITE® 6700 in white colour can be screen or digitally printed or laminated with overlay films with the ORALITE® products recommended below. The printed or laminated sheeting will continue to meet the retroreflective values of the respective colour provided that ORAFOL's application guidelines are followed. The overlay films recommended are: ORALITE® 5061 Transparent Film, ORALITE® 5090 Anti Dew film and ORALITE® 5095 Anti Graffiti film. The screen printing ink recommended is ORALITE® 5018. A transparent coating is not necessary. The material can also be printed with the ORALITE® UV Traffic Sign Printer using ORALITE® 5019 UV Digital Printing Ink and a protective overlay film.

Please refer to the Practical Information #4.5 published by ORAFOL for full instructions or contact your ORAFOL Reflective Solutions Division representative for advice relating to the above.

Warranty

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the Warranty document published by ORAFOL for detailed information

Note: All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment. Batch traceability is possible on the basis of the roll number.

Product Data

Retroreflectivity for new sheeting (cd/lx/m²) as per EN12899-1:2007 and ASTM D4956-13:

Table 1 – Specific coefficient of retroreflection (exceeding class RA1)									
Observation angle	0.2°			0.33°			2°		
Entrance angle	5°	30°	40°	5°	30°	40°	5°	30°	40°
white (010)	100	40	10	80	35	9	5	2.5	1.5
yellow (020)	60	26	7	45	20	6	3	1.5	1
orange (035)	30	12	2.2	25	10	2.2	1.2	0.5	#
red (030)	22	9	2	17	6.5	1.8	1	0.5	0.5
blue (050)	6	2.4	0.5	4	1.3	#	#	#	#
green (060)	13	5	1.5	11	5	1.2	0.5	0.3	0.2
brown (080)	5	2	#	20	8	#	#	#	#

- reflectivity larger than zero

Table 2 – Specific coefficient of retroreflection (ASTM 4956-13, Type I)				
Observation angle	0.2°		0.5°	
Entrance angle	-4°	30°	-4°	30°
white (010)	70	30	30	15
yellow (020)	50	22	25	13
orange (035)	25	7	13	4
red (030)	14	6	7.5	3
blue (050)	4	1.7	2	0.8
green (060)	9	3.5	4.5	2.2
brown (080)	1	0.3	0.3	0.2

Colour specification limits for new sheeting:

Table 3 – Chromaticity coordinates (DIN 6171-1:2013-10)									
Colours	1		2		3		4		Luminance Factor β
	x	y	x	y	x	y	x	y	
white (010)	0.305	0.315	0.335	0.345	0.325	0.355	0.295	0.325	≥ 0.27
yellow (020)	0.494	0.506	0.470	0.480	0.513	0.437	0.545	0.455	≥ 0.16
orange (035)	0.631	0.369	0.552	0.359	0.506	0.404	0.570	0.430	≥ 0.12
red (030)	0.735	0.265	0.700	0.250	0.607	0.343	0.655	0.345	≥ 0.03
blue (050)	0.100	0.109	0.146	0.156	0.183	0.115	0.137	0.038	≥ 0.01
green (060)	0.007	0.703	0.216	0.448	0.147	0.400	0.018	0.454	≥ 0.03
brown (080)	0.455	0.397	0.523	0.429	0.479	0.373	0.558	0.394	0.03 – 0.09

Table 4 – Chromaticity coordinates (ASTM D4956)									
Colours	1		2		3		4		Luminance Factor (Y %)
	x	y	x	y	x	y	x	y	
white (010)	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	≥ 27
yellow (020)	0.498	0.412	0.557	0.442	0.479	0.520	0.438	0.472	$15 \geq Y \geq 45$
orange (035)	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	$10 \geq Y \geq 30$
red (030)	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	$2.5 \geq Y \geq 15$
blue (050)	0.140	0.035	0.244	0.210	0.190	0.255	0.065	0.216	$1 \geq Y \geq 10$
green (060)	0.026	0.399	0.166	0.364	0.286	0.446	0.207	0.771	$3 \geq Y \geq 12$
brown (080)	0.430	0.340	0.610	0.390	0.550	0.450	0.430	0.390	$1 \geq Y \geq 9$

Physical and Chemical Properties

Thickness* (without protective paper and adhesive)	0.170 mm (6.8 mils)
Temperature resistance	adhered to aluminium, -56° C to +82° C (-70° F to 180° F)
Resistance to cleaning agents	adhered to aluminium, 8h in solution (0.5% household cleaning agents) at room temperature and 65° C (150° F), no variation
Adhesive power**¹ (FINAT-TM 1 after 24h, stainless steel)	15 N/25mm (1 inch)
Shelf life***	1 year
Application temperature	> +10° C (50° F)
Service life by specialist application** under vertical outdoor exposure	7 years (not printed)
<small>* average ** standard central European climate *** in original packaging, at 20° C and 50% relative humidity ¹ 180° Peel @ 300mm (12") /min</small>	

Note: Values stated in SI units are to be regarded as standard. The values in parentheses are conversions and shall not be considered as the standard, as these values maybe approximate.

IMPORTANT NOTICE

When using ORALITE® 6700 sheeting the relevant national specifications have to be complied with. ORAFOL recommends you obtain the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

ORALITE® is a trademark of ORAFOL Europe GmbH.



ORALITE® 5061

TRANSPARENT OVERLAY FILM

Technical
Datasheet
01/16
Page 1 of 1

Description

3-mil*, high-performance, PMMA film. Available in clear, yellow, red, orange, blue, green, and brown transparent with a gloss finish. Also available in opaque black with a gloss finish.

Release Liner

4-mil, PET, silicone-coated on one side, reverse treated

Adhesive

Solvent polyacrylate, permanent, transparent

Area of Use

Used as a protective layer on white or printed ORALITE® reflective films intended for long-term outdoor use. Recommended for use on ORALITE® 5800, 5860 and 5900. Meets or exceeds color and photometric requirements of ASTM D 4956 specifications when used with ORALITE® 7900 Wide Observation Angle Prismatic (coming soon), 5900, or 5800 reflective films.

Technical Data

Thickness* (without liner and adhesive)	3-mil
Dimensional Stability (FINAT TM14)	Adhered to steel, no shrinkage in cross direction; in length, 0.004"
Temperature resistance	Adhered to aluminum, -69°F to 194°F
Adhesive Power (FINAT TM-1, after 24h, average)	Adhered to stainless steel: 4.1 lb/in (1 inch) (film tear)
Shelf life**	2 years
Minimum life expectancy*** (based on accepted application procedures on vertical surfaces)	Up to 12 years
Minimum Application temperature	> +50°F
Available lengths	150' (50-yard) and 75' (10-yard)
Available widths	24", 48"

*average ** in original packaging, at 68°F and 50% relative humidity *** standard central European climate

Note:

All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

IMPORTANT NOTICE

When using ORALITE® sheeting, please comply with relevant national specifications. ORAFOL recommends obtaining the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable, although, such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure respectively. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The self-adhesive reflective material can only be used for dry application. The low tensile strength of the material can make the removability of the reflective film more difficult. Please review applicable application information published by ORAFOL.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at www.orafolamericas.com for detailed information.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

ORALITE® is a trademark of ORAFOL Europe GmbH.



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570
techsupport-americas@orafol.com - www.orafolamericas.com

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H 6X5
Phone: 888.727.3374

ORACAL® 651

INTERMEDIATE CALENDERED FILM

Technical Datasheet

07/14

Page 1 of 2

Description

2.5-mil, intermediate calendered PVC film with excellent dimensional stability and very good cutting and application characteristics. Available in 60 vivid colors plus transparent, matte white and matte black.

Release Liner

84# custom silicone-coated paper with special release characteristics that provide excellent weeding and release values. Customized blue silicone paper liner for matte and gloss white face film provides superior contrast for weeding.

Adhesive

Clear, solvent-based, permanent adhesive

Area of Use

Ideal for medium-term indoor and outdoor lettering, marking and decoration. Matte finish available in black and white.

Technical Data

Thickness (without liner and adhesive)	2.5-mil
Dimensional Stability (FINAT TM-14)	Adhered to steel, no shrinkage in cross direction; In length, <.016"
Temperature Resistance	Adhered to aluminum, -40°F to +176°F, no variation
Fire Behavior (DIN 75200) Fire Rating	Adhered to steel, self-extinguishing ASTM E 84-07 Class "A"
Adhesive Power (FINAT TM-1, after 24 h, average)	Adhered to stainless steel: 4.1 lb/in
Tensile Strength (DIN EN ISO 527)	Along: Min. 19 MPa Across: Min. 19 MPa
Elongation at Break (DIN EN ISO 527)	Along: Min. 130% Across: Min. 150%
Seawaterability (DIN 50 021)	Adhered to aluminum, after 100h/73°F, no variation
Shelf Life (68°F/50% relative humidity)	2 years
Minimum Life Expectancy (based on accepted application procedures on vertical surfaces)	6 years - colors/transparent/black and white 4 years - metallic 3 years – brilliant blue
Minimum Application Temperature	46°F
Available Lengths Available Widths	150' (50-yard) and 30' (10-yard) 15" (punched), 24", 30", 48" 36" and 60" available in transparent, black, and white
Recommended Application Tapes	ORATAPE® Series HT55, MT95, MT72
Print Compatibility	Thermal Transfer (gloss finish only)

Note

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. Films with structured surface are naturally more sensitive than the unstructured. Accordingly, these films are to be treated carefully both in processing and in cleaning. Impurities affect the appearance of structured films and require more frequent cleaning. Furthermore the application information published by ORAFOL is to be considered. The batch traceability according to ISO 9001 is possible on the basis of the roll number.



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570
techsupport-americas@orafol.com

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H 6X5
Phone: 888.727.3374
www.orafolamericas.com

ORACAL® 651 INTERMEDIATE CALENDERED FILM

Technical Datasheet

07/14

Page 2 of 2

IMPORTANT NOTICE

All ORACAL® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORACAL® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORACAL® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use.

All specifications are subject to change without prior notice.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.



ORAFOL Americas – GA
1100 Oracal Parkway
Black Creek, GA 31308
Phone: 888.672.2251

ORAFOL Americas – CT
120 Darling Drive
Avon, CT 06001
Phone: 800.654.7570

ORAFOL Canada
2831 Bristol Circle
Oakville, Ontario L6H 6X5
Phone: 888.727.3374

techsupport-americas@orafol.com – www.orafolamericas.com

Description

Semi-transparent transfer paper with high dimension stability and moisture resistance. Used for the application of die-cut or computer-cut letters and symbols.

Adhesive

Natural rubber, low adhesive strength

Area of use

The special composition of the adhesive enables problem-free transfer of die-cut or computer-cut letters and symbols using dry bonding techniques. This transfer paper has been developed for special uses which require an extraordinary low adhesive power. Specially developed for the transfer of large format letters and symbols made of ORALITE® Reflective Films.

Technical Data

Thickness* (film with adhesive)	110 micron
Weight* (film with adhesive)	100 g/m ²
Adhesive power* (FINAT TM 1, after 20 min, stainless steel)	2 N/25 mm
Tensile strength (DIN EN ISO 527)	Along: min. 5,4 MPa Across: min. 3,5 MPa
Elongation at break (DIN EN ISO 527)	13,5%
Shelf life**	6 months
Application temperature	> +10° C

* average ** in original packaging, at 20° C and 50% relative humidity

IMPORTANT NOTICE

All ORATAPE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORATAPE® products is based upon research which the Company believes to be reliable although such information does not constitute a warranty. Because of the variety of uses of ORATAPE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

ORATAPE® is a registered trademark of ORAFOL Europe GmbH.