

Procurement Procedures

Materials and Specifications

Sign Maintenance Procedures

Typography Reference

Reference Material

Reproduction Materials

Sign Materials		E.1
	<p>The following is a list of sign materials, manufacturers and products for use by Sign Program Managers and maintenance personnel. These manufacturers have demonstrated the capability to comply with Corps Sign Standards with the products listed below.</p>	<p>This list is not all inclusive. Those manufacturers wishing to demonstrate the capability to meet Corps standards must provide proof of capabilities to the District Sign Program Manager.</p>
HDO Plywood	Simpson Timber Company Third and Franklin Shelton, WA 98584 1-206-427-9624	Guardian HDO (High Density Overlaid) Plywood
Hardware	<p>Stafast Products Inc. 505 Lake Shore Boulevard Painesville, OH 44077-1197 1-216-357-5546</p>	<p><i>T-nut:</i> T142094 (1/4"-20) T3816154 (3/8"-16)</p> <p><i>Socket Head Cap Bolts:</i> 1/4"-20 x 3.5" 3/8"-16 x 3.5"</p>
	<p>Stewart Fastener P.O. Box 241328 Charlotte, NC 28224 1-704-527-4713</p>	T-nuts, cap nuts, socket head bolts, and wood screws.
Stain <i>Redwood sign panels, redwood posts, and treated timber sign posts. Treated timbers will not take stain until they have weathered for a few months.</i>	<p>Olympic Stain 2233 112th Avenue, N.E. Bellevue, WA 98004 1-800-426-6306 206-453-1700 (in Washington State)</p>	<p>Stain No. 715 If not available, mix using the following Olympic formula: 6-parts No. 726 and 1-part No. 712.</p>
	<p>Benjamin Moore & Co. 51 Chestnut Ridge Road Montvale, NJ 07645 201-573-9600</p>	Moorwood Semi-transparent Stain and Wood Preservative, Color: Manor Brown 081-63
Sign Panel Paint <i>HDO sign panel edges and backs</i>	Benjamin Moore & Co. 51 Chestnut Ridge Road Montvale, NJ 07645 201-573-9600	<i>Poly-Silicone Enamel:</i> COE Brown120-63
Paint	Benjamin Moore & Co. 51 Chestnut Ridge Road Montvale, NJ 07645 201-573-9600	<i>Alkyd Enamel:</i> White: Impervo Enamel 133-01
		<p>Communication Red: Impervo Enamel COE-63</p> <p><i>Primer:</i> Moorwhite Primer 100-00</p>
Reflective Liquid <i>Used to fill letters on routed redwood signs.</i>	3M Company Traffic Control Materials Division 255-5S-08, 3M Center St. Paul, MN 55144-1000 1-800-553-1380	3M White No. 7216
Translucent Ink <i>For screen printing Corps Brown on retro-reflective sheeting.</i>	Currently not available	
Clear Water Repellent <i>Unstained interior surfaces of redwood signs.</i>	The Flood Company P.O. Box 379 Hudson, OH 44236 1-800-321-3444 (outside Ohio) 1-216-650-4070 (in Ohio)	Aquatrol

Engineer Grade Retro Reflective Sheeting

Recreation signs and traffic signs on HDO plywood and aluminum. (Not for use on waterway signs.)

3M Company
Traffic Control Materials Division
255-5S-08, 3M Center
St. Paul, MN 55144-1000
1-800-553-1380

Pressure Sensitive:
White 3290
Highway Yellow 3271
Lemon Yellow 580-81
Orange 1484
Red 3272

Heat Activated:
White 2290
Highway Yellow 2271
Red 2272

Avery International
Fasson Reflective Products
250 Chester Street
Painesville, OH 44077
1-800-327-4461

* not engineering grade

Pressure Sensitive:
White Fassign 1500
Corps Brown Fassign 1520
Highway Yellow Fassign 1501
Chartreuse RTC Reflective *
Orange Fassign 1504
Red FE-702
Blue FE-705

Heat Activated:
White Fassign 1600
Corps Brown Fassign 1620
Highway Yellow Fassign 1601
Orange Fassign 1604

Non Reflective Vinyl Film

Industrial safety signs, parking signs, and black typography and graphics on Lemon Yellow "Warning" signs.

3M Company
Traffic Control Materials Division
255-5S-08, 3M Center
St. Paul, MN 55144-1000
1-800-553-1380

Pressure Sensitive:
White 3650
Yellow 3622
Red 3621
Blue 3626
Green 3680-56
Black 3655

Positionable Film
White 180-10
Yellow 180-15
Red 180-13
Blue 180-17
Green 180-56
Black 180-12

Avery International
Fasson Reflective Products
250 Chester Street
Painesville, OH 44077
1-800-327-4461

Reposition able Pressure Sensitive Film
White Fascal -900
Yellow Fascal -902
Red Fascal -910
Blue Fascal -912
Green Fascal -905

Edge Sealer

Wrap for use only across top edge of HDO plywood signs with engineer grade retro-reflective sign faces.

3M Company
Traffic Control Materials Division
255-5S-08, 3M Center
St. Paul, MN 55144-1000
1-800-553-1380

Pressure Sensitive
Transparent Vinyl 3669

Avery International
Fasson Reflective Products
250 Chester Street
Painesville, OH 44077
1-800-327-4461

Pressure Sensitive
Clear Vinyl Fascal 961

Sign Materials (cont'd)		E.1b
Diamond Grade Retro Reflective Sheeting <i>Waterway signs and lake markers (For application to aluminum exclusively, not for HDO plywood panels.)</i>	3M Company Traffic Control Materials Division 255-5S-08, 3M Center St. Paul, MN 55144-1000 1-800-553-1380	<i>Pressure Sensitive:</i> White 3970 Lemon Yellow 3923 Fluorescent Red 3972 Blue 3975
Self Adhesive Edge Moulding <i>To be applied to exterior edges of waterway signs</i>	Trim Gard Company Ltd. 472 Newbold Street London, Ontario Canada N6E 1K6 519-681-1090 Telefax 519-681-9880	White Series 20 Edge Moulding
Self Adhesive Seam Tape <i>To be applied to internal edges of multi- panel waterway signs</i>	3M Company Traffic Control Materials Division 255-5S-08, 3M Center St. Paul, MN 55144-1000 1-800-553-1380	<i>Pressure Sensitive:</i> Clear EC Film 1170 (Will be supplied in 3/4" by 50 yard rolls under Product Code No. 75-0299-9452-4)
Aluminum <i>Traffic and waterway signs.</i>	Pacemaker Industries P.O. Box 11527 Spokane, WA 99211 1-800-541-0508 Adam Metal Supply, Inc 625 Evans Street Elizabeth, NJ 07207 1-201-351-2550	Large aluminum panels, traffic signs, Z-bars, and wind-beam frames. Sheet and structural products

The following is a list of fabricators (F) and installers (I) who have the capability to fabricate signs to Corps Sign Standards. Federal Acquisition Regulations, Part 8, Subpart 8.6 requires the Corps to purchase those products manufactured by Federal Prison Industries from UNICOR unless they grant a waiver. In cases where waivers have been granted, secondary suppliers listed have the capability to meet Corps standards.

HDO Plywood Signs
Recreation area

- U.S. Department of Justice (F)
UNICOR
Federal Prison Industries, Inc.
320 First Street, N.W.
Washington, D.C. 20534
202-724-8239

Hall Signs, Inc (F)
3000 West Third Street
Bloomington, Indiana 47402
800-284-7446

Interstate Highway Sign Co. (F)
Division of Mark IV Industries
6005 Scott Hamilton Drive
Little Rock, Arkansas 72219
501-490-5242

Lyle Sign (F)
7934 Wallace Road
Eden Prairie, MN 55344
612-934-7653
- System Graphics (F/I)
P.O. Box 280
Chapin, SC 29036
800-845-1080

Rocal, Inc. (F)
24 South Main Street
Frankfort, Ohio 45628
614-998-2122

Safeway Sign Company (F)
9575 Yucca Road
Adelanto, CA 92301
619-245-7070

Newman Signs, Inc. (F)
1606 Sixth Avenue, S.W.(58401)
Jamestown, North Dakota 58402
701-252-1970

Traffic Signs
Regulatory traffic, parking/ no parking, approach roadway directional, and waterway signs. NOTE: Traffic signs may also be ordered from any of the HDO Plywood sign suppliers noted above.

- U.S. Department of Justice (F)
UNICOR
Federal Prison Industries, Inc.
320 First Street, N.W.
Washington, D.C. 20534
202-724-8239

Waterway Signs
All large fabricated sign structures and graphics

- U.S. Department of Justice (F)
UNICOR
Federal Prison Industries, Inc.
320 First Street, N.W.
Washington, D.C. 20534
202-724-8239

Hall Signs, Inc. (F)
3000 West Third Street
Bloomington, Indiana 47402
800-284-7446

Interstate Highway Sign Co. (F)
Division of Mark IV Industries
6005 Scott Hamilton Drive
Little Rock, Arkansas 72219
501-490-4242

Lyle Sign (F)
7934 Wallace Road
Eden Prairie, MN 55344
612-934-7653
- Rocal, Inc. (F)
24 South Main Street
Frankfort, Ohio 45628
614-998-2122

Safeway Sign Company (F)
9575 Yucca Road
Adelanto, CA 92301
619-146-7070

Newman Signs, Inc. (F)
1606 Sixth Avenue, S.W.(58401)
Jamestown, North Dakota 58402
701-252-1970

Routed Redwood Signs <i>Standard and secondary identification</i>	Columbus Graphics, Inc. (F/I) 146 South Yale Avenue Columbus, Ohio 43222 614-351-1771	SouthWood Corporation (F/I) P.O. Box 240457 Charlotte, NC 28224 800-438-6302
Building Interior Signs <i>Offices, visitor centers and powerhouses</i>	APCO (F/I) 388 Grant Street Atlanta, GA 30312-2227 404-688-9000	
Polyethelene Signs <i>Boundary Markers, temporary Title 36 posting panels</i>	U.S. Department of Justice (F) UNICOR Federal Prison Industries, Inc. 320 First Street, N.W. Washington, D.C. 20534 202-724-8239	J.L. Darling Corporation (F) 2212 Port of Tacoma Road Tacoma, WA 98421 206-383-1714
Number Display Permits <i>Shoreline management permits with a factory applied permit number</i>	J.L. Darling Corporation (F) 2212 Port of Tacoma Road Tacoma, WA 98421 206-383-1714	
Flexible Post Markers <i>Boundary markers and campsite identifiers</i>	Carsonite International (F) 2900 Lockheed Way Carson City, NV 89701 800-648-7974	
Individual Letterforms <i>Fabricated exterior identification signs for wall mounting on large structures</i>	McCurdy Shea Architectural Fabricators (F/I) 2550 Knights Station Road Lakeland, FL 33804 800-552-3700	Cornelius Architectural Products (F/I) 30 Pine Street Pittsburgh, PA 15223 412-781-7840
Porcelain Enamel <i>Title 36 posting panel, interpretive and historic markers</i>	Enameltec (F) 60 Armstrong Avenue Georgetown, Ontario L7G 4R9 Canada 800-663-8543 416-798-7697, Telefax: 416-873-9617	Winsor Porcelain Enamel Display Inc. (F) 312 Columbia Street N.W. Olympia, WA 98501 206-786-8200, Telefax: 206-786-6631
Large Scale Cut Graphics <i>Waterways</i>	U.S. Department of Justice (F) UNICOR Federal Prison Industries, Inc. 320 First Street,N.W. Washington, D.C. 20534 202-724-8239	System Graphics (F/I) P.O. Box 280 Chapin, SC 29036 800-845-1080