## Surface Materials Reference Manual February 2020

#### What's New?

Spec News is available on *village.steelcase.com*. Search Steelcase Marketing Resources (AdStock) and download the current release's Spec News.

Tip: Steelcase Marketing Resources is a new global platform for ordering Steelcase marketing materials that replaces AdStock.

View or download Steelcase Specification Guides at http://www.steelcase.com/en./resources/design/spec-guide/pages/specguides.aspx.

#### **Surface Materials**

**The Finish Library** can be found at http://finishlibrary.steelcase.com.

**Resources – The Fine Print,** in the back of this manual, contains a wealth of information about our surface materials.

Surface Materials Overview	3
Global Palette Overview	9
Steelcase Surfaces Program	23
Availability Matrices	39
Test Standards and Technical Information	145
Select Surfaces Program	163
Custom Surfaces Programs	171
Material Direction Guidelines	187
Fire Codes	193
Established and Transitional Surface Materials	203
Resources – The Fine Print	207

For a list of all trademarks, refer to the last page of this reference manual.

### **Vertical Surface Fabric Technical Information**

Steelcase Surfaces

Steelcase Textiles	
Abacus <b>G</b>	▶Page 153
Alloy	▶Page 153
Bariolage	▶Page 153
B-Free Knit ●	▶Page 153
Billiard Multi-Use by Designtex	▶Page 153
Boccie	▶Page 153
Bouquet <b>G</b>	▶Page 153
Buzz2 ●	▶Page 153
Charm	►Page 153
Code	►Page 153
Flip: Orbit	►Page 154
Flip: TexHex	►Page 154
Fresco	►Page 154
Lapel	►Page 154
Latch	▶Page 154
Milano <b>9</b>	▶Page 154
Optic	▶Page 154
Pianista	▶Page 154
Rhythm	▶Page 154
Sprite	▶Page 154
Tinsel	►Page 155

#### **Application**

Systems, casegoods, and architecture.

See page 138, *Vertical Surface Fabric Matrix*, for product line availability.

**3** = Established

 = This pattern is part of the global surface materials palette. Geographical differences, by product line, may apply.

	Abacus (3	Alloy	Bariolage	B-Free Knit	Billiard Multi-Use by Designtex
Price Group	1	1	2	N.A.	3
Content	100% polyester	100% polyester (antimony free yarn**)	100% pre-consumer recycled polyester	100% polyester	100% polyester
Backing	Acrylic	None	None	None	None
opical Finish	None	None	Light dip coat	None	None
onstruction	Jacquard weave	Jacquard weave	Dobby weave	Knit	Dobby weave
/idth	66"	66"	66"	N.A.	54"
Repeat Size	24.5" vertical x 14.4" horizontal	None	2.15" vertical x 3.33" horizontal	None	None
ype of Dyeing	Yarn	Jet	Yarn	Yarn	Yarn
brasion Taber	300 cycles	400 cycles	400 cycles	60,000 double rubs	2,500 cycles min
Colorfastness	Class 4	Class 4	Class 4	Class 4-5	Class 4 or better
Cleaning Code	WS	WS	WS	WS	WS
abric Weight	Approximately 9.1 ounces per linear yard	Approximately 9.97 ounces per linear yard	Approximately 13 ounces per linear yard	33 ounces per linear yard	Approximately 14.9 ounces per linear yar
Drigin	Canada	USA	Canada	Canada	Taiwan
CT Symbols	# # *	# * *	<b>#</b> ★ ★	# ★ A	# * A
Varranty	12 years	12 years	12 years	12 years	12 years
	Boccie	Bouquet (3	Buzz2	Charm	Code
Price Group	1	2	1	1	2
Content	100% pre-consumer recycled polyester	60% pre-consumer recycled polyester, 40% post-consumer recycled polyester	100% polyester (antimony free yarn**)	100% pre-consumer recycled polyester	59.8% pre-consumer recycled polyester, 40.2% post-consume recycled polyester
Backing	None	None	None	None	None
Topical Finish	Polyester dip coat	None	None	Light dip coat	None
Construction	Dobby weave	Jacquard weave	Dobby weave	Jacquard weave	Jacquard weave
Width	66"	66"	54"	66"	66"
Repeat Size	0.29" vertical x 0.29" horizontal	28.81" vertical x 9" horizontal	None	1.57" vertical x 13.53" horizontal	15.8" vertical x 16.8" horizontal
Type of Dyeing	Yarn	Yarn	Piece	Yarn	Beam and package
Abrasion Taber	600 cycles	150 cycles	900 cycles	400 cycles	150 cycles
Colorfastness	Class 4	Class 4	Class 4	Class 4	Class 4.5
leaning Code	WS	S	W	WS	WS
abric Weight	Approximately 9.8 ounces per linear yard	Approximately 11.2 ounces per linear yard	Approximately 14.5 ounces per linear yard	Approximately 10 ounces per linear yard	Approximately 15 ounces per linear yar
	1	1	USA	Canada	USA
	Canada	USA	USA	Cariada	00/1
Origin ACT Symbols	Canada	USA	# # * A	# <b>*</b> ★	# # *

**<sup>3</sup>** = Established

 <sup>=</sup> This pattern is part of the global surface materials palette.

Geographical differences, by product line, may apply. Global colors are noted by this globe symbol.

	Flip: Orbit	Flip: TexHex	Fresco	Lapel	Latch
	-	-			
Price Group	2	2	2	1	2
Content	58% pre-consumer recycled polyester, 42% post-consumer recycled polyester	83% pre-consumer recycled polyester, 17% post-consumer recycled polyester	80% pre-consumer recycled polyester, 20% post-consumer recycled polyester	100% pre-consumer recycled polyester	59.74% post-consume recycled polyester, 40.26% pre-consume recycled polyester
Backing	None	None	None	None	None
opical Finish	None	None	None	None	None
Construction	Jacquard weave	Jacquard weave	Jacquard weave	Jacquard weave	Jacquard weave
Vidth	66"	66"	66"	66"	66"
Repeat Size	9" vertical x 8.25" horizontal	29.44" vertical x 16.5" horizontal	17.88" vertical	None	.25" vertical x .25" horizontal
ype of Dyeing	Yarn	Yarn	Yarn	Piece	Beam / Yarn
Abrasion Taber	100 cycles	100 cycles	200 cycles	600 cycles	300 cycles
Colorfastness	Class 4	Class 4	Class 4	Class 4	Class 4
Cleaning Code	S	S	S	WS	S
abric Weight	Approximately 16 ounces per linear yard	Approximately 16 ounces per linear yard	Approximately 11.1 ounces per linear yard	Approximately 9.4 ounces per linear yard	12.27 ounces per linear yard
Drigin	USA	USA	USA	USA	USA
ACT Symbols	<b>#</b> ₩ ☆	# ₩ ☆	# ₩ ☆	# * *	# 0 * *
Varranty	12 years	12 years	12 years	12 years	12 years
	Milano 3	Optic	Pianista	Rhythm	Sprite
Price Group	2	1	1	1	А
Content	65% pre-consumer recycled polyester, 35% post-consumer recycled polyester	70% pre-consumer recycled polyester, 30% post-consumer recycled polyester	100% pre-consumer recycled polyester	74% pre-consumer recycled polyester, 26% post-consumer recycled polyester	95% pre-consumer recycled polyester, 5% post-consumer recycled polyester
Backing	None	None	None	Polyester	None
opical Finish	None	None	Light dip coat	None	None
Construction	Jacquard weave	Jacquard weave	Jacquard weave	Jacquard weave	Dobby weave
Vidth	66"	66"	66"	66"	66"
Repeat Size	13.5" vertical	22.7" vertical x 16.5" horizontal	9.71" vertical x 14.03" horizontal	31.85" vertical x 16.5" horizontal	.83" vertical x .26" horizontal
Type of Dyeing	Yarn	Yarn	Yarn	Yarn	Package
Abrasion Taber	200 cycles	200 cycles	300 cycles	200 cycles	150 cycles
Colorfastness	Class 4	Class 4	Class 4	Class 4	Class 4
Cleaning Code	S	W	WS	W	WS
	Approximately 10.7	Approximately 9.4 ounces per linear yard	Approximately 7.47 ounces per linear yard	Approximately 12.1 ounces per linear yard	Approximately 10.8 ounces per linear ya
abric Weight	ounces per linear yard			1	1
	USA	USA	Canada	USA	USA
Fabric Weight Origin ACT Symbols	<u> </u>	USA	Canada	USA	USA

	Tinsel
Price Group	1
Content	100% pre-consumer recycled polyester
Backing	None
Topical Finish	Light dip coat
Construction	Jacquard weave
Width	66"
Repeat Size	0.25" vertical x 0.15" horizontal
Type of Dyeing	Warp: natural Fill: natural and package
Abrasion Taber	400 cycles
Colorfastness	Class 4
Cleaning Code	WS
Fabric Weight	Approximately 7.83 ounces per linear yard
Origin	Canada
ACT Symbols	# 0 * *
Warranty	12 years

## **Seating Upholstery Technical Information**Steelcase Surfaces

Woven/Knit Materials	
Billiard Multi-Use by Designtex	▶Page 157
Bo Peep	▶Page 157
Buzz2 ●	▶Page 157
Chainmail	▶Page 157
Cogent: Connect	▶Page 157
Cogent: Trails	▶Page 157
Era	▶Page 157
Gaja — Cradle to Cradle Certified™ Silver ●	▶Page 157
Imperma	▶Page 157
Jacks <b>3</b>	▶Page 157
Link	▶Page 158
New Black: Bruce	▶Page 158
New Black: Harley	▶Page 158
New Black: Henry	▶Page 158
New Black: Jack	▶Page 158
New Black: James	▶Page 158
Nitelights	▶Page 158
Playground <b>3</b>	▶Page 158
Redeem	▶Page 158
Remix	▶Page 158
Retrieve	▶Page 159
Silk ●	▶Page 159
Spyder <b>9</b>	▶Page 159
Steelcut Trio	▶Page 159
Texel	▶Page 159
Leather/Coated Materials	
Brisa	▶Page 160
Elmosoft Leather	▶Page 160
Foundation	▶Page 160
Seating Vinyl	▶Page 160
Stand In	▶Page 160
Steelcase Leather	▶Page 160
Other Upholstery	
3D Knit ⊕	▶Page 161
3D Microknit	▶Page 161
Connect 3D ●	▶Page 161
Jersey Mesh	▶Page 161
QiVi Net ●	▶Page 161
Reply Air Mesh	▶Page 161
Stand In Steelcase Leather  Other Upholstery 3D Knit  3D Microknit Connect 3D  Jersey Mesh QiVi Net  Reply Air Mesh	

#### **Application**

See page 122, Seating Upholstery Matrix, for product line availability.

Established

= This pattern is part of the global surface materials palette. Geographical differences, by product line, may apply.

	Billiard Multi-Use	Во Реер	Buzz2	Chainmail	Cogent:
	by Designtex	-			Connect
Price Group	3	5	1	2	2
Content	100% polyester	100% wool	100% polyester (antimony free yarn)	100% post consumer recycled polyester*	100% antimony free polyester*
Backing	None	None	None	None	None
Topical Finish	None	None	None	None	None
Construction	Dobby weave	Dobby weave	Dobby weave	Dobby weave	Circular knit
Width	54"	54"	54"	54"	62"
Repeat Size	None	None	None	013" vertical x 0.25" horizontal	None
Type of Dyeing	Yarn	Piece	Piece	Piece	Jet
Wyzenbeek	60,000 double rubs	90,000 cycles Martindale Method	100,000 double rubs	100,000 double rubs	100,000 double rubs
Colorfastness	Class 4 or better	Class 4	Class 5	Class 4	Class 4
Cleaning Code	WS	S	WS	WS	WS
Fabric Weight	Approximately 14.9 ounces per linear yard	Approximately 27 ounces per linear yard	Approximately 18 ounces per linear yard	Approximately 16.4 ounces per linear yard	Approximately 16.4 ounces per linear yard
Soil Retardant	Available with upcharge	Available with upcharge	Available with upcharge	Available with upcharge	Available with upcharg
Origin	Taiwan	Brazil	USA	USA	USA
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	# ₩ A	# × ×	# ★ A	<b>₩</b> ★ A	# * A
Warranty	12 years	5 years	12 years	12 years	12 years
	Cogent: Trails	Era	Gaja — Cradle to Cradle Certified <sup>™</sup> Silver ⊕	Imperma	Jacks (3
Price Group	2	1	3	3	1
Content	63% antimony free polyester*, 30% polyester, 7% post consumer recycled polyester	100% polyester (antimony free yarn)	100% wool	50% pre-consumer recycled nylon, 50% nylon	100% polyester
Backing	None	None	None	Nylon	Polybinder
Topical Finish	None	None	None	None	Soil retardant
Construction	Jacquard weave	Dobby weave	Dobby weave	Jacquard weave	Jacquard weave
Width	54"	54"	55"	54"	54"
Repeat Size	18.82" vertical x 3.75" horizontal	None	None	0.38 vertical	0.13" vertical x 0.13" horizontal
Type of Dyeing	Yarn	Piece	Piece	Solution	Piece
Wyzenbeek	84,000 double rubs	100,000 double rubs	40,000 cycles, Martindale	200,000 double rubs	50,000 double rubs
Colorfastness	Class 4	Class 5	Class 4	Class 4	Class 4
Cleaning Code	W	WS	S	WS	WS
Fabric Weight	Approximately 12 ounces per linear yard	Approximately 18 ounces per linear yard	Approximately 16.10 ounces per linear yard	Approximately 11.0 ounces per linear yard	Approximately 9.08 ounces per linear yard
Soil Retardant	Available with upcharge	Available with upcharge	Available with upcharge	Available with upcharge	Pretreated
Origin	USA	USA	Lithuania	USA	USA
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	# * A	# ★ A	# * A	# * A	# × A
	1 17 - ///	1 1 2 ///	1 · · · · · · · · · · · · · · · · · · ·	1 1	1 · · · · · · · · · · · · · · · · · · ·

<sup>\*\*\*</sup>Flame retardant chemicals are chemical or chemical compounds for which a functional use is to resist or inhibit the spread of fire that is present in any covered product.

<sup>=</sup> This pattern is part of the global surface materials palette. Geographical differences, by product line, may apply. Global colors are noted by this globe symbol.

	Link	New Black: Bruce	New Black: Harley	New Black: Henry	New Black: Jack
Price Group	1	1	2	1	2
Content	100% polyester	100% post-consumer recycled polyester	100% post-consumer recycled polyester	100% post-consumer recycled polyester	100% post-consumer recycled polyester
Backing	Polyester	None	None	None	None
Topical Finish	Soil retardant	None	None	None	None
Construction	Dobby weave	Jacquard weave	Jacquard weave	Jacquard weave	Jacquard weave
Width	54"	56"	56"	56"	56"
Repeat Size	0.19" vertical 0.25" horizontal	0.33" vertical x 0.96" horizontal	0.34" vertical x 0.12" horizontal	0.16" vertical x 0.16" horizontal	0.37" vertical x 0.06" horizontal
Type of Dyeing	Piece	Piece	Piece	Piece	Piece
Wyzenbeek	55,000 double rubs	100,000 double rubs	100,000 double rubs	100,000 double rubs	100,000 double rubs
Colorfastness	Class 4	Class 4-5	Class 4-5	Class 4-5	Class 4-5
Cleaning Code	WS	WS	WS	WS	WS
Fabric Weight	Approximately 9 ounces per linear yard	Approximately 10.5 ounces per linear yard	Approximately 12.88 ounces per linear yard	Approximately 10.4 ounces per linear yard	Approximately 12.5 ounces per linear yard
Soil Retardant	Pretreated	Available with upcharge	Available with upcharge	Available with upcharge	Available with upcharge
Origin	USA	Canada	Canada	Canada	Canada
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	<b>#</b> ₩ ☆	# <b>☆</b> A	# ★ A	# <b>☆</b> A	# × A
Warranty	5 years	12 years	12 years	12 years	12 years
	New Black: James	Nitelights	Playground (3	Redeem	Remix
Price Group	2	2	3	3	5
Content	100% post-consumer recycled polyester	85% pre-consumer recycled polyester, 15% post-consumer recycled polyester	100% pre-consumer recycled polyester	87.5% post consumer recycled polyester, 12.1% pre-consumer recycled polyester 0.4% polyester	90% wool, 10% nylon
Backing	None	Acrylic	None	None	None
Topical Finish	None	None	None	None	None
Construction	Jacquard weave	Jacquard weave	Jacquard weave	Jacquard weave	Dobby weave
Width	54"	54"	54"	54"	54"
Repeat Size	0.17" vertical x 0.09" horizontal	0.75" vertical	5" vertical x 4.8" horizonta	None	None
Type of Dyeing	Piece	Piece	Jet	Piece	Piece
Wyzenbeek	100,000 double rubs	55,000 double rubs	85,000 double rubs	90,000 double rubs	75,000 cycles, Martindale
Colorfastness	Class 5	Class 4	Class 4	Class 4	Class 4
Cleaning Code	WS	S	WS	WS	S
Fabric Weight	Approximately 12.8 ounces per linear yard	Approximately 11 ounces per linear yard	Approximately 10 ounces per linear yard	Approximately 10 ounces per linear yard	Approximately 14.84 ounces per linear yard
Soil Retardant	Available with upcharge	Available with upcharge	Available with upcharge	Available with upcharge	Available with upcharge
Origin	Canada	USA	Canada	Canada	Great Britain
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	# <b>☆</b> △	# * A	# * A	# <b>*</b> A	# <b>☆</b> A
Warranty	12 years	5 years	12 years	5 years	5 years

<sup>\*\*\*</sup>Flame retardant chemicals are chemical or chemical compounds for which a functional use is to resist or inhibit the spread of fire that is present in any covered product.

<sup>=</sup> This pattern is part of the global surface materials palette. Geographical differences, by product line, may apply. Global colors are noted by this globe symbol.

	Retrieve	Silk	Spyder ()	Steelcut Trio	Texel
Price Group	3	5	2	7	3
Content	73.4% post consumer recycled polyester, 26% pre-consumer recycled polyester, 0.6% polyester	67% wool, 22% flax, 11% silk	100% polyester,	90% wool, 10% nylon	50% pre-consumer recycled nylon, 50% nylon
Backing	None	None	Polyester	None	Nylon
Topical Finish	None	None	Soil retardant	None	None
Construction	Jacquard weave	Dobby weave	Jacquard weave	Dobby weave	Jacquard weave
Width	57"	54"	54"	55"	54"
Repeat Size	1" vertical x 1.44" horizontal	None	5" vertical x 7.13" horizontal	None	4.63 vertical x 7" horizontal
Type of Dyeing	Piece	Piece dyed	Piece	Yarn	Solution
Wyzenbeek	90,000 double rubs	100,000 double rubs	65,000 double rubs	75,000 cycles, Martindale	200,000 double rubs
Colorfastness	Class 4	Class 4	Class 4	Class 4	Class 4.5
Cleaning Code	WS	WS	WS	S	WS
Fabric Weight	Approximately 11.7 ounces per linear yard	Approximately 22 ounces per linear yard	Approximately 9.3 ounces per linear yard	Approximately 28.37 ounces per linear yard	Approximately 10.7 ounces per linear yard
Soil Retardant	Available with upcharge	Available with upcharge	Pretreated	Available with upcharge	Available with upcharge
Origin	Canada	UK	USA	Great Britain	USA
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	# * A	# ★ A	# ★ A	# * A	# * A
Warranty	5 years	5 years	5 years	5 years	12 years

<sup>\*\*\*</sup>Flame retardant chemicals are chemical or chemical compounds for which a functional use is to resist or inhibit the spread of fire that is present in any covered product.

<sup>=</sup> This pattern is part of the global surface materials palette. Geographical differences, by product line, may apply. Global colors are noted by this globe symbol.

# **Seating Upholstery Technical Information**Non-Woven

	Brisa	Elmosoft Leather	Foundation	Seating Vinyl ()	Stand In
Price Group	6	Elmosoft Leather	2	2	2
Content	100% polyurethane	100% leather	100% FR-free vinyl	100% vinyl	100% polyurethane
Backing	Rayon	None	Polyester	Knit	Polyester/Cotton Blend
Topical Finish	None	None	None	None	None
Construction	Faux Leather	Hides	Vinyl	Vinyl	Polyurethane
Width	54"	Square footage varies with the size of the hide	54"	54"	54"
Repeat Size	None	None	None	None	None
Type of Dyeing	N/A	Piece	N/A	Piece	Piece
Wyzenbeek	200,000 double rubs	Not applicable	100,000 double rubs	150,000 double rubs	150,000 double rubs
Colorfastness	Class 4	Class 4	Class 4	Class 4	Class 4
Cleaning Code	WS	See page 208, Care of Surface Materials	See page 208, Care of Surface Materials	See page 208, Care of Surface Materials	WS
Fabric Weight	Approximately 13.8 ounces per linear yard	Not applicable	Approximately 30 ounces per linear yard	Approximately 35 ounces per linear yard	Approximately 17 ounces per linear yard
Origin	Japan	Sweden	USA	USA	Taiwan
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	# * A	# #	# * A	# * A	# # A
Warranty	5 years	12 years	12 years	12 years	12 years

	Steelcase Leather
Price Group	Leather
Content	100% leather
Backing	None
Topical Finish	None
Construction	Hides
Width	Square footage varies with the size of the hide
Repeat Size	None
Type of Dyeing	Piece
Wyzenbeek	Not applicable
Colorfastness	Class 4
Cleaning Code	See page 208, Care of Surface Materials
Fabric Weight	Not applicable
Origin	USA
Flame Retardant Chemicals***	No
ACT Symbols	# 0 *
Warranty	12 years

<sup>\*\*\*</sup>Flame retardant chemicals are chemical or chemical compounds for which a functional use is to resist or inhibit the spread of fire that is present in any covered product.

## **Seating Upholstery Technical Information**Mesh/Knit

	3D Knit	3D Microknit	Connect 3D	Jersey Mesh	QiVi Net
Price Group	N.A.	N.A.	N.A.	N.A.	N.A.
Content	100% polyester	100% polyester	100% polyester (antimony free yarn**)	100% polyester	100% nylon 6.6
Backing	None	None	None	None	None
Topical Finish	None	None	None	None	None
Construction	Knit	Knit	Knit	Mesh	Weft knit
Width	57"	50"	60"	58"	Part/knit to size
Repeat Size	0.38" vertical x 0.22" horizontal	None	0.13" vertical x 0.17" horizontal	None	None
Type of Dyeing	Jet	Piece	Jet	Yarn	Atmospheric
Wyzenbeek	100,000 double rubs	100,000 double rubs	100,000 double rubs	100,000 double rubs	100,000 double rubs
Colorfastness	Class 4	Class 5	Class 4	Class 4	Class 4
Cleaning Code	WS	WS	WS	WS	WS
Fabric Weight	Approximately 19 ounces per linear yard	Approximately 18 ounces per linear yard	Approximately 20.5 ounces per linear yard	Approximately 16.9 ounces per linear yard	Approximately 1.79 ounces per linear yard
Soil Retardant	Not applicable	Not applicable	Not applicable	Available with upcharge	None
Origin	USA	USA	USA	USA	USA
Flame Retardant Chemicals***	No	No	No	No	No
ACT Symbols	# * A	# × A	# * A	# ★ A	# * A
Warranty	12 years	12 years	12 years	12 years	12 years
	Poply Air Moch				

	Reply Air Mesh 🏶
Price Group	N.A.
Content	64% polyester, 36% polyamide
Backing	None
Topical Finish	None
Construction	Dobby weave
Width	58"
Repeat Size	None
Type of Dyeing	Yarn
Wyzenbeek	100,000 double rubs
Colorfastness	Class 4
Cleaning Code	WS
Fabric Weight	Approximately 14.5 ounces per linear yard
Soil Retardant	Available with upcharge
Origin	Italy
Flame Retardant Chemicals***	No
ACT Symbols	# * A
Warranty	12 years

<sup>\*\*\*</sup>Flame retardant chemicals are chemical or chemical compounds for which a functional use is to resist or inhibit the spread of fire that is present in any covered product.

= This pattern is part of the global surface materials palette. Geographical differences, by product line, may apply. Global colors are noted by this globe symbol.

# The Fine Print

# **Resources – The Fine Print**

The Fine Print contains information you might want to know (but is not necessarily required to specify).

Care of Surface Materials	
Sustainable Cleaning Solutions	208
Vertical Surface Fabrics and Seating Upholstery	208
Vertical Surface Vinyl	208
Fire Code Seating on Molded Foam	208
Leather Upholstery	209
Polyurethane Upholstery	209
Vinyl Upholstery	209
Acrylic	209
Markerboard Writing Surfaces	209
Worksurfaces and Finishes	210
Fabric Treatment	211
Specification Tools	
Surface Materials Binders	212
Samples	213
Sample Ordering Information - Steelcase Surfaces	213
Sample Ordering Information – Global Palette	213
Sample Ordering Information – Select Surfaces	213
Who To Call	214
Steelcase Textiles Cut Yardage Program	215
Glossary	216
Color Number Index	220

Surface Materials Reference Manual 207

#### **Care of Surface Materials**

#### **Sustainable Cleaning Solutions**

A variety of companies and groups assert that their cleaning products are better for humans and the environment than others. Steelcase has not evaluated all of these claims, but believes that Green Seal (www. greenseal.org) is one good source for identifying sustainable cleaning solutions. Green Seal is an independent nonprofit organization with experience in certifying products and services that are sustainable. When searching the site, use GS-37 as the life cycle-based sustainability standard.

## **Vertical Surface Fabrics** and **Seating Upholstery**

Remove as much soil or staining material as possible by carefully vacuuming, brushing, or scraping with a dull instrument.

Cleaning codes apply only to the outer part of your fabric. Do not over-wet the fabric! If you do, you may damage the upholstery's filling materials. Special finishes or laminations, such as a protective coating (e.g., C-1™) or a flame-retardant treatment, may modify a fabric's cleaning code due to the adhesive type used in lamination (e.g., "WS" code may change to "S" or "W" code).

- **W** Clean only with water-based shampoo or foam upholstery cleaner. (Water-based cleaning agents are often sold as upholstery shampoo. They are usually sold as foams, concentrated liquids, and dry compounds. Do not over wet. Do not use dry cleaning solvents. Pile fabric may require brushing to restore its appearance. Remove cushion covers to launder.
- **S** Clean only with dry cleaning solvent. Do not saturate. Do not use water. Remove cushion covers to launder.
- **WS** Clean with a mild detergent shampoo, foam, or dry cleaning solvents. Do not saturate with liquids. Pile fabric may require brushing to restore its appearance. Remove cushion covers to launder.
- X Do not clean with either water or solvent-based cleaner. Use only vacuuming or light brushing.

#### **Cleaning Code W**

Follow these directions for removing water-borne, non-greasy soil or stains (such as coffee, milk, soft drinks, fruit juices, washable ink, etc.):

- 1 Gently apply a water-based cleaner, that is specifically made for cleaning fabric, to the soiled area using a clean cloth or sponge, such as an upholstery shampoo.

  2 Work the cleaner into a lather or foam, if possible, to minimize soaking the fabric. Using light brushing motions, work from the outside of the soiled area toward the center to prevent rings.
- Allow fabric to dry completely, then vacuum thoroughly.

#### Cleaning Code S

Follow these directions for removing oil-borne soil or stains (such as salad dressing, grease, lipstick, ball-point ink, etc.):

- 1 Gently apply a dry-cleaning fluid to the soiled area using a dampened, clean cloth or soft-bristle brush.
- 2 Using quick, light, rubbing or brushing strokes, work from the outside of the soiled area toward the center to prevent rings. Avoid soaking the fabric.
- **3** Gently blot with a clean, absorbent cloth to soak up and remove dampened soil.
- 4 Allow fabric to dry completely, then vacuum thoroughly.

#### Large Areas

When large fabric areas must be cleaned, such as complete panels, it is recommended that you employ a professional cleaning firm that uses a dry-foam upholstery shampoo and an immediate wet pick-up vacuum system, that does not exceed 170F.

**Do not steam clean** or use other methods that soak or heat the fabric.

Regular and proper maintenance of your upholstery fabric permits less frequent cleaning

Maintenance is routine, on-going care which reduces soil buildup on a fabric's surface. Maintenance also includes treating spots and stains promptly.

Vacuum regularly with a proper upholstery attachment to remove air-borne dust and lint thoroughly.

Clean periodically to remove accumulated grime and retain the fabric's original appearance as much as possible.

Clean protective arm covers and head rests so they do not look different from the rest of your upholstery. Promptly treat spots and stains. (An International Fabricare study confirmed the detrimental effects of allowing stains to age, when they could have been successfully removed, if treated immediately. After one week, 20% of stains could not be removed. After 3 weeks, 50% of stains could not be removed. If stain has oxidized, or totally hardened, it forms an insoluble product that cannot be removed). Turn and rotate loose cushions to equalize wear and soiling.

#### Fire Code Seating on Molded Foam

Because of the heat application used to adhere the fabric to the foam substrate, do not use steam in cleaning the Fire Code Seating (FCS) fabric. This heat could melt the adhesive and loosen the fabric.

Use a dry-shampoo application that has a wet pick-up. A wet pick-up minimizes moisture in the foam that may cause future mildew or breakdown in the foam.

#### **Leather Upholstery**

Dusting with a clean, dry cloth is the recommended routine cleaning method for an aniline-dyed, full-grain leather. For spots and spills, wipe excess liquid immediately and let air dry. If necessary, use lukewarm water and mild non-detergent soap, work into a thin lather with a soft cloth, rinse with clean water, and buff to restore luster. The use of any other product could cause reactions with the solvent-free chemicals used in the tanning process.

Part of leather's unique appeal is the sophisticated aging process that occurs over time. Soft, comfort wrinkles can appear upon use and are considered common. Comfort wrinkles are a normal characteristic of leather and are part of the natural qualities and softness that leather provides. Leather has naturally occurring markings from the everyday activities of an animal's life and as a result, some of these markings can show on an upholstered chair. These markings are what give each chair unique character and premium quality.

#### **Polyurethane Upholstery**

For regular maintenance, use lukewarm water and mild soap to remove most soil and stain. Do not over-saturate the material with water.

For stubborn stains, remove as much soil or staining from the material as possible by carefully vacuuming or brushing with a dull instrument. Lift most stains with an alcoholbased cleaner. Disinfect using 10:1 water /bleach solution. Thoroughly rinse all cleaning solution residue with water and let air dry. To remove ballpoint pen, address the stain immediately by wiping with isopropyl alcohol (rubbing alcohol). Not all ink stains can be removed.

Never use furniture polishes, oils, solvents, varnishes, abrasive cleaners, or solutions of ammonia and water on polyurethane.

#### Vinyl Upholstery

Clean the soiled area with mild soap and water; then rinse with fresh water and wipe dry with clean cloth. For more difficult stains, wipe affected area with a soft cloth or soft bristle brush using a non-abrasive cleaner, for example, Formula 409 or Fantastik. Rinse with fresh water and wipe dry.

Never use furniture polish, oils, varnishes, abrasive cleaners or ammonia. Isopropyl Alcohol (70%) can be used to remove the most difficult stains that cannot be removed with soap and water. It is important to rinse the cleaned area with fresh water after applying the alcohol solution.

#### Acrylic

Dust with a soft, damp cloth or chamois. Clean only with mild soap, detergent and water, or Pledge. **Do not** use windowcleaning fluids, scouring compounds, gritty cloths, leaded or ethyl gasolines, or strong solvents such as alcohol, acetone, carbon tetrachloride, etc. To remove tar, grease, paint, etc., use naphtha or kerosene. Rinse well and dry with a soft, damp cloth or chamois. Polish acrylic by applying a thin, even coating of automobile paste wax with a soft cloth. Do not use a cleaner-wax combination. Remove minor surface scratches by waxing. Remove deeper scratches by sanding lightly with 400-grit, "wet or dry" sandpaper and buffing with a clean, muslin wheel dressed with a good grade of fine-grit buffing compound. A 1/4" electric drill with a 4" buffing wheel has sufficient RPMs. Buff lightly with a clean cotton flannel or jersey cloth.

Avoid aromatic solvents and abrasives.

Acrylic is combustible, so observe fire and safety procedures appropriate for compatible forms of wood. Do not expose to excessive heat or flame.

#### **Markerboard Writing Surfaces**

Use dry erase markers only. Remove dry-erase markings with a markerboard eraser or soft cloth as often as possible. Change erasers, as they become dirty. Dirty erasers will leave ink residue on the surface

For daily cleaning, or as needed, use a dry erase cleaner, or a non-abrasive household cleaner, such as glass cleaner. This may be done with a soft cloth or sponge. Dry the surface with a soft cloth prior to writing. All markings should be removed weekly.

#### **Caution:**

- Do not use permanent markers on markerboard surfaces. In the event a permanent marker is used, removal of markings may be attempted by using dry erase cleaner, or by writing over the marking with a dry erase marker and erasing with a markerboard eraser or soft cloth.
- Do not use abrasive cleaners or solvent type cleaning solutions, such as Ketones (Acetone, MEK, etc.) lacquer thinner, nail polish remover, etc. because they may remove the finish from the markerboard surface.

#### Cleaning Instructions for Answer Markerboard Skins:

- **1** Use clean dry eraser or microfiber cloth to remove as much ink as possible.
- 2 Use Expo cleaner or other markerboard cleaner with microfiber cloth. If the markerboards are used daily, cleaning may be required 2-3 times a week.
- 3 For heavily used boards and persistent markings, clean with 91% Isopropyl Alcohol (IPA) with a microfiber cloth. It is recommended that the markerboard skins be cleaned with 91% IPA once a week. Tip: Use of household cleaners on Answer markerboard skins is not recommended.

#### **Worksurfaces and Finishes**

### For all laminate tops, painted and plated metals, and plastics

Wiping with a damp cloth will remove general soiling and water-borne stains. If needed, use a hard-surface, all purpose cleaner such as Formula 409, Fantastic, Top Job, or Mr. Clean. Follow the manufacturer's instructions for general purpose cleaning. To prevent staining, ink should be removed as soon as possible. Do not use paint thinners, naphtha, or solvent-based fluids. To fill scratches in woodgrain laminate tops, use an oak, walnut, or mahogany putty stick which can be purchased at paint supply and hardware stores.

Clean metal finishes with a non-abrasive cleaner. Apply the cleaner sparingly, making sure that it does not come into contact with any wood surface. Wipe the hardware dry with a clean, soft cloth.

#### **Protecting Wood Surfaces**

Use desk pads and coasters to help protect the finish against dents, scratches, moisture and hot and cold liquids. Do not use desk pads that have plastic backing. Use felt or leather pads on the bottoms of office equipment and accessories. Periodically move desk accessories and other objects kept on the worksurface to ensure even aging. Lift objects when you move them, instead of pulling or pushing them across the surface, to avoid scratching the surface. Avoid leaving vinyl binders on worksurface for long periods. If you use a protective glass top, insert felt pads between the glass and the worksurface, to create an air space and allow the wood to breathe. Keep your furniture away from direct sunlight. Avoid extreme temperatures and humidity. Maintain temperatures between 60 and 80 degrees Fahrenheit and humidity levels between 30 and 50 percent.

#### **Cleaning Wood Surfaces**

Keep a supply of soft, clean, absorbent cloths handy for wiping up spills and regular dusting. To dust, wipe with a slightly damp, soft cloth, using another soft cloth to dry. Always wipe the surface in the direction of the woodgrain. Use a quality cleaner or flax soap formulated especially for use on wood surfaces. Do not use oils or ammonia. Dilute the cleaner as directed by the manufacturer. Dampen but do not saturate a soft cloth with the diluted cleaning solution. Wipe the surface in the direction of the woodgrain to remove dirt and fingerprints. Wipe the surface clean with a soft, dry cloth. Quality spray wax may be applied sparingly twice a year. Excessive waxing may result in a wax build-up which feels sticky and attracts an unusual amount of dirt. For information about how to remove this wax, contact your facilities department or Steelcase dealer. Wood is a "forgiving" material which can usually be repaired. If your worksurface is damaged, call your facilities department or Steelcase dealer.

#### **Maintenance Contract**

Many Steelcase dealers offer maintenance contracts for your convenience. Contact your dealer for more information.

210 Surface Materials Reference Manual