

## Table of Contents

Introduction	Knoll and Sustainable Design	3
	GREENGUARD Indoor Air Quality Certified®	4
	Using the KnollExtra Price List	5
	Placing Your Order	$\epsilon$
	KnollExtra Visual Index	7
	KnollExtra Bracket Chart	12
	Maintaining Your Purchase	13
Lighting	LED Light Series: Sparrow® : by Antenna Design	14
	LED Light Series: Highwire®: by Antenna Design	16
	LED Light Series: T- light: by Antenna Design	18
	LED Light Series: Sparrow® International : by Antenna Design	20
	LED Light Series: Highwire® International : by Antenna Design	22
	LED Light Series: T- light International : by Antenna Design	24
	Copeland™ Light: by Stephan Copeland	26
Power Series	Power Series : Power Cube	28
	Power Series : Power Disc	30
Desktop Accessories	The Smokador™ Collection: Exec Rectilinear	32
	The Smokador™ Collection: Leather	36
	The Smokador™ Collection: Desk Pads	38
	The Smokador™ Collection: Replacement Parts	40
Organizational Tools	KnollExtra Magnetic Accessory Cup: Antenna Design	42
	Orchestra® Universal System Accessories : by Bruce Hannah & Ayse Birsel	44
Technology Management	Sapper™ Monitor Arm Collection: Easy Order Single Arm Kits	60
	Sapper™ Monitor Arm Collection: Easy Order Double Arm Kits	66
	Sapper™ Monitor Arm Collection: Easy Order Triple Monitor Support Kits	70
	Sapper™ Monitor Arm Collection: Easy Order Quadruple Mount Support Kits	74
	Sapper™ Monitor Arm Collection: Easy Order Sapper Sleeve Arm Kits	76
	Sapper™ Monitor Arm Collection: Easy Order Sapper 50® Single Arm kits	80
	Sapper™ Monitor Arm Collection: Easy Order Sapper 50® Double Arm kits	84
	Sapper™ Monitor Arm Collection: Easy Order Sapper 50® Sleeve Arm Kits	88
	Sapper™ Monitor Arm Collection: Easy Order Beam Kits for 3 Monitors with Table Clamps	92
	Sapper™ Monitor Arm Collection: Easy Order Beam Kits for 3 Monitors with Antenna Mounts	94
	Sapper™ Monitor Arm Collection: Easy Order Beam Kits for 4 Monitors with Table Clamps	96
	Sapper™ Monitor Arm Collection: Easy Order Beam Kits for 4 Monitors with Antenna Mounts	98
	Sapper™ Monitor Arm Collection: Easy Order Double Beam Kits for 6 Monitors with Table Clamps	100
	Sapper™ Monitor Arm Collection: Easy Order Double Beam Kits for 6 Monitors with Antenna Mounts	102
	Sapper™ Monitor Arm Collection: Easy Order Double Beam Kits for 8 Monitors with Table Clamps	104
	Sapper™ Monitor Arm Collection: Easy Order Double Beam Kits for 8 Monitors with Antenna Mounts	106
	Sapper™ Monitor Arm Collection: Monitor Arms and Brackets	108
	Sapper™ Monitor Arm Collection: Movement Joints and VESA Plate Adaptors	112
	Sapper™ Monitor Arm Collection: Beams	116
	Sapper™ Monitor Arm Collection: Masts	118
	Sapper™ Monitor Arm Collection: Adjustment Knobs and Mast Cable Management Clips	120
	Sapper™ Monitor Arm Collection: Mounting Options	122
	Sapper™ Monitor Arm Collection: Mounting, Construction and Application Information	128
	Sapper XYZ® Monitor Arm Series: Easy Order Sapper XYZ Single Arm Kits	134
	Sapper XYZ® Monitor Arm Series: Easy Order Dual Sapper XYZ Arm Kit	138
	Sapper XYZ® Monitor Arm Series: Easy Order Sapper XYZ Crossbar Kits	140
	Sapper XYZ® Monitor Arm Series: Mounting Options for Sapper XYZ Single Arms	144
	Sapper XYZ® Monitor Arm Series: Sapper XYZ Crossbar Mounting Options	146
	Sapper XYZ® Monitor Arm Series: Replacement Parts for Sapper XYZ Single Arms	148
	Sapper XYZ® Monitor Arm Series: Sapper XYZ Crossbar Replacement Parts	150
	Sapper XYZ® Monitor Arm Series: Mounting, Construction and Application Information	152
	Adjustable Keyboard Supports: Easy Order Kits	154
	Freestanding Ergonomic Accessories	156
	Adjustable CPU Holders: Vertical and Sling CPU Holders	158
Storage	Storage: pencil drawers	160
Communication Boards	Universal Marker Boards: by Bruce Hannah & Ayse Birsel	162

		KnollExtra
	Universal Fabric Boards: Standard Sizes	164
	Universal Fabric Boards: Options and Mounting Information	166
	Scribe™ Mobile Markerboards: by Antenna Design	168
Alpha-Numeric Index		170
Selling Policy		172
General Ordering Information		174

### Knoll and Sustainable Design

Each year Knoll sets key initiatives in our journey to sustainability. We are members of a global consortium on energy, have adopted a scientific, metrics-based approach to sustainable product design, and maintain a leadership position in establishing universal, verifiable, sustainability standards for our industry.

Knoll promotes independent third-party certification because it provides the most impartial and trustworthy foundation for industry-wide environmental compliance. Certification by established and respected third parties ensures that all manufacturers are held to the same high standards and that customers can trust a company's declaration about the environmental benefits of its products. Knoll third-party partners include: the International Standards Organization (ISO); Forest Stewardship Council (FSC®); Rainforest Alliance; GREENGUARD® Environmental Institute; and The Business and Institutional Furniture Manufacturer's Association (BIFMA) level® certification from Scientific Certification Systems (SCS).

In addition, Knoll is aligned with the U.S. Green Building Council and can help companies, healthcare organizations and educational institutions achieve Leadership in Energy and Environmental Design (LEED®) workplace certification.

### **Global Climate Change**

- Knoll is a sponsor of the Clinton Global Initiative, which brings together a community of global leaders to devise and implement solutions to some of the world's most pressing challenges, including environmental change.
- Knoll has a comprehensive Energy Management Program to increase energy efficiency in products and processes.

### Life Cycle Assessment (LCA) Tool

- Life Cycle Assessment is a science-based measurement of a product's environmental impacts throughout its life cycle, from raw
  materials sourcing through manufacture, shipping, use and re-use or end-of-life. LCA enables cradle-to-cradle implementation of
  sustainable practices.
- Knoll has partnered with The Green Standard.org to develop an affordable, universal ISO-compliant computer-based LCA tool that
  can be used by the entire contract furniture industry and is partnering on the development of an Environmental Product Declaration
  System (EPDs) for Knoll products. EPDs are verified documents containing LCA results and additional environmental performance
  information about a product.

### **Setting Industry Standards**

- Knoll partners with MTS (The Institute for Market Transformation to Sustainability) to develop the SMaRT<sup>©</sup> Consensus Sustainable Products Standards, a set of consensus-based sustainable product standards based on the LEED<sup>®</sup> model, for all building products, fabric, apparel, flooring and carpet. MTS, the developer of SMaRT<sup>©</sup>, is an accredited American National Standards Institute (ANSI) standard developer.
- Knoll also partners with BIFMA (Business and Institutional Furniture Manufacturers Association) to promote level® sustainability standards for the contract furniture industry.
- Knoll has established FSC® (Forest Stewardship Council) certified wood as the standard for general office open plan office systems, casegoods and tables.
- Knoll has launched Full Circle, a resource recovery program developed with ANEW, to help customers extend the life cycle of surplus furniture, fixtures and equipment (FF&E) in an economically, socially and environmentally responsible manner.
- Our goal is to encourage all manufacturers in the contract furniture industry and related industries to adopt standards that will lead to sustainable products and practices.

For more information about Knoll and sustainable design, visit knoll.com/environment.

All Knoll Office Seating is GREENGUARD and GREENGUARD Gold certified.

All KnollExtra® products are GREENGUARD certified.

Visit GREENGUARD.org for more information and to find printable certificates for Knoll Office Seating that can be used for verification and LEED® submission.

GREENGUARD provides the only guide to certified low-emitting interior products and building materials. Its goal is to help building owners and managers, architects, interior designers and product specifiers build and furnish healthier offices, hospitals, schools and homes by providing a register of tested and certified low-emitting products and materials.

GREENGUARD certification is recognized by the U.S. Green Building Council's LEED® Program. Air Quality Science, an independent indoor air quality laboratory, tests products submitted for certification using stringent environmental chamber testing protocols and current indoor air quality standard. Certification is administered by the GREENGUARD Environmental Institute (GEI), an industryindependent, non-profit organization.

**GREENGUARD Gold certification** complies with the State of California's Department of Health Services Standard Practice (CA Section 01350) for testing chemical emissions from building products used in schools, offices and other sensitive environments. Certified products can contribute to achieving credits in the CHPS Best Practices Manual for K-12 schools, the LEED® Green Building Rating System, Green Guide for Healthcare<sup>TM</sup>. NAHB Green Building Guidelines, Green Globes, Regreen and numerous other local authorities' green building codes.

Knoll Office Seating and KnollExtra® products can contribute to achieving LEED® credits. GREENGUARD-tested and certified office furniture is required for Credit 4.5 in the LEED-CI Indoor Environmental Quality section.

### GREENGUARD Certification Program

- Internationally recognized for evaluating product emissions and certifying building materials, furnishings, finishes and cleaning products and processes that meet stringent indoor air quality criteria defined by GEI.
- Products undergo rigorous, third-party testing to determine their impact on indoor air pollution with requirements for ongoing testing and verification.
- Certification confirms a manufacturer's environmental responsibility, and signifies their environmental achievements through independent, third-party testing and verification.
- GREENGUARD Certified products are recommended by leading sustainable building programs, including:
  - U.S Green Building Council's (USGBC) LEED Rating System,
  - National Association of Home Builders (NAHB) Green Building Guidelines,
- Green Guide for Health Care (GGHC),
- Collaborative for High Performance Schools (CHPS) Best Practices Manual,
- New York City Department of Design and Construction
   Sustainable Design
   Specifications, among others.

### An Overview

In the first part of the Price List you'll find Lighting and Power Series

The second part features a full range of desktop accessories including Smokador and Orchestra, perfect for panel-mounted or freestanding application.

Part three offers a broad range of systems support products, including technology management and communication boards.

Can't find it? Consult the Table of Contents on page 1 or the Alpha-numeric Index on page 170.

## Product Information on Each Page

The KnollExtra Price List was designed to provide you with everything you need to know in order to understand, specify, and care for KnollExtra products. On each page, the following features will assist you:

Description/Construction explains salient features, capabilities, materials, and country of origin.

Dimensions provide the overall space the product will require. Statistics are based on the maximum width, depth and height of the product.

Weight is based on the product itself. It does not include packaging or complementary items such as pens, memo paper or calendars.

Order Code/Ordering Information outlines exactly how to specify KnollExtra product and the full scope of finish options. The Order Code provides an example of how one pattern number is specified.

Custom Options reviews availability of special sizes, finishes etc.

#### For More Information

For more information, contact your Knoll sales representative, telephone Customer Service at 1-800-343-5665, or visit one of the Knoll showrooms listed on the last page of this book.

### **A Word About Finishes**

KnollExtra finishes are designed to complement a broad range of interiors and office products.

Key KnollExtra finishes coordinate with specific Knoll systems finishes:

Product	Core Finish	Office System Finishes
Orchestra Load bar / Slat board	Medium grey (115)	Medium grey (115)
	Soft grey (117)	Soft grey (117)
	Black (111)	Black (111)
	Beige Mist (611)	Beige Mist (611)

### **Use the Following Addresses**

If you would like to send a standard lead time order to our order entry department, please use the following address:

For North American orders: Knoll, Inc. 1235 Water Street East Greenville, PA 18041 Attn: Order Entry

Fax: 215 679-1788 Tel: 800 343-KNOLL

All accepted orders will be confirmed in writing on the Knoll standard order confirmation form.

### **Ship-Complete Orders**

Orders that must ship complete are to be so stated on the purchase order. Products with different lead times, combined on one order, can be acknowledged for shipment based on the longest of those lead times. Orders not marked "ship complete" will be released according to the confirmation, and invoiced in increments.

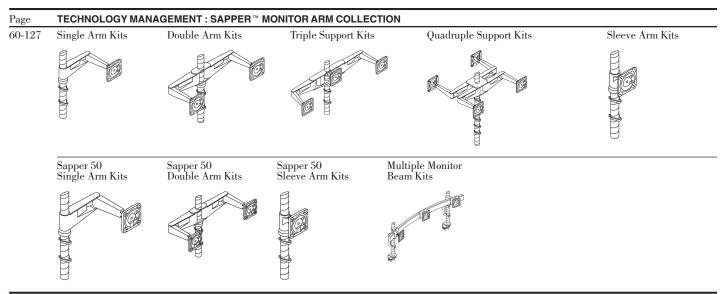
### For More Information

For complete Knoll Selling Policy and warranty information, please refer to page 172 of this price list.

For additional information on KnollExtra, contact your Knoll representative, a Knoll dealer, or telephone Customer Services at 800 343-KNOLL.

Page	LIGHTING					
14-25	Sparrow® LED	Highwire® LED	T-light LED			
26-169	Copeland Standard	Copeland Compact				
Page		GEMENT : POWER SER				
28-29	Power Cube 24 x 24	Power Cube 36 x 36	Power Disc			
Page	THE SMOKADOR COL	LECTION				
32-33	Memo Box	Business Card Holder	Round Pencil Cup	Round Clip cup	Single Letter Tray	Double Letter Tray
				8		
34-35	Round Wastebasket	Rectilinear Wastebasket				
36-37	Single Letter Tray	Memo Box	Pencil Cup	Coasters	Round Wastebasket	
38-39	Rectilinear Desk Pad	Conference Pad	Radiused Desk Pad	Oval Conference Pad		

### KNOLLEXTRA MAGNETIC ACCESSORY CUP Page 42-43 Magnetic Accessory Cup Page ORCHESTRA UNIVERSAL SYSTEM ACCESSORIES 44-47 Side Side Double Letter Tray Single Letter Tray Double Letter Tray Single Letter Tray Single Legal Tray Double Legal Tray 48-49 2-Way Binder Bin Vertical Paper Pack Slanted Sorter File Sorter Hanging File Holders 50-51 Pencil Cup Utility Tray Tape Dispenser Memo Tray 52-53 **Bud Vase** Telephone Shelf Wastebasket & Recycling Wastebasket 54-74 Slat board: 61/2"H Slat board: 14<sup>3</sup>/<sub>4</sub>"H Load Bar/Info Rail Worksurface: Mounted Bracket



### Page TECHNOLOGY MANAGEMENT : SAPPER XYZ® MONITOR ARM SERIES

134-149 Single Arm Kits



Crossbar







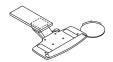
### Page TECHNOLOGY MANAGEMENT: ADJUSTABLE KEYBOARD SUPPORTS

106-117 27" Integrated



21" Swivel HP







Page TECHNOLOGY MANAGEMENT

156-157 Surf Board or VDT Corner





VDT Sleeve

140-141 Adjustable Vertical CPU Holder





Page STORAGE

160-161 Universal Pencil Drawer







Page	COMMUNICATIONS	BOARDS			
162-169	Marker Board	Marker Tray	Fabric Boards	Scribe™ Mobile Markerboard	

Manufacturer		System	Bracket Suffix
Knoll		Reff	R
		Dividends	DV
	(stanchion-mounted)	Dividends	DS
		Calibre	CE
		Currents	С
	$(stanchion\hbox{-}mounted)$	Currents	CS

<sup>\*</sup>EY for orchestra brackets. If your system is not listed, please consult your Knoll sales representative or Customer Service at 1-800-343-5665.

#### Maintenance

While KnollExtra relies on highly durable materials in each product line, regular basic maintenance will ensure the longevity of your product. Most stains, marks, and discolorations can be removed by following the simple instructions outlined on this page.

#### **Plastic**

Windex and a dry cloth.

#### SofStone

Early removal of a stain makes SofStone care much easier. This is especially true of coated areas which are frequently handled. If oil smudges are allowed to build up, they can soften the suede coating, and become very difficult to remove. Most dirt and smudges can be removed by the following methods:

- 1. Greasy stains (crayon, oil, lipstick, etc.): remove grease and wax stains with a napthadampened lint-free cloth. Change the cloth frequently to remove as much grease as possible without spreading the stain.
- 2. Non-greasy stains (dirt, coffee, mustard, catsup, etc.): dirt and smudge areas can generally be removed by using a sponge or soft bristle brush with Liquid Ajax, Mr. Clean, Lestoil, or 3M brand carpet spot remover and upholstery cleaner. Follow the instructions on the label, and rinse thoroughly with clear water and a lint-free cloth.
- 3. Combination stains (chocolate, ice cream, gravy, soup, etc.): combination stains are caused by materials that contain both greasy and non-greasy substances. First use the procedures for non-greasy stains as stated above. Then, rinse thoroughly with clear water and thoroughly dry with a lint-free cloth. If greasy stain persists, follow the procedure for greasy stains as stated above. Repeat as necessary.

#### Stainless Steel:

Windex and a dry cloth.

### Antique Brass, Brushed Zinc and Black Oxide:

A damp cloth with no cleaning agents.

### Satin Brass:

Pledge.

#### Linoleum:

Windex and a dry cloth.

## Contemporary and Traditional Standard Leathers:

Mild soap and water on a soft cloth.

### Spinneybeck Leathers:

As a result of the high quality aniline dye process, most scratches or minor stains can be removed simply by gently rubbing them with your fingers. The body's natural oils revitalize the leather. For stubborn stains, use mild soap and water. Take care to wash the surface evenly since soaps may slightly alter the leather's tonality.

### **Surf Collection:**

Wipe nylon skin using warm water and mild detergent. Do not use abrasives.

### Office Automation

Accessories/Storage Drawers: Clean with a soft cloth and Windex, Fantastik, Endust or other non-abrasive household cleaners. Remove stubborn stains with

For Surf Board and VDT Sleeve soft touch paints, never use abrasives. Clean with lukewarm water and a soft cloth.

### Marker Boards:

For day-to-day use, surface requires only a dry cleaning with a standard felt eraser or dry cloth. For best results, keep marker board and marker pens at room temperature. KnollExtra suggests Bic Great Erase BOLD marker pens which are designed for use on marker boards. All marker pens should be tightly capped and stored horizontally when not in use.

Follow the instructions below as a periodic maintenance program, or to remove stubborn stains:

- 1. Clean with EV-1 or any liquid ammonia-added cleaner and rinse with clean water, then dry. For best results, wash board like a window with sponge and squeegee.
- 2. Interim cleaning may be done by sprinkling a dry powdered cleanser on an eraser and applying to the board in a circular motion. Rinse with clean water, then dry.

3. To remove crayon, scotch tape, or other stubborn materials, apply a mild solvent or paste made with scouring powder and water.

#### Fabric Boards:

Despite the durability of most panel textiles, fabric boards are subject to long-term soiling and wear. A regular maintenance program will significantly lessen soil and dirt build up or staining on your fabric boards. Cleaning is particularly important in areas adjacent to air conditioning or ventilation systems.

Remember to consult the care instructions provided by the fabric manufacturer. The general recommendations below should apply to most fabric boards.

- 1. Avoid excessive heat or moisture which can affect finishes and adhesives. Never allow fabric panels to become wet inside the core. Room temperature should be maintained between 50 and 85 degrees; humidity should be maintained between 20 and 50%.
- 2. Avoid contact with sharp edges which could puncture the surface.
- Do not handle fabric boards more than necessary. Avoid bending or flexing the panels; this could break the bond between the surface and core materials.
- 4. Grease or oil should be wiped off immediately upon contact. Remove excess grease or oil by blotting. Use hot water and mild soap to remove any remaining residue.
- 5. Whenever possible, clean only with warm water and mild soap. Use caution when applying cleaning agents, particularly those that contain alcohol, strong alkalis, or solvents. These ingredients may react to the vinyl backing or adhesives used in the fabric boards. Always test cleaning agents on fabric from the rear of the panel before using on the front.
- 6. Care should be taken in using strong room cleaners or pesticides. Their fumes may contain agents which lead to the loosening of the fabric board glue bond.

## LED Light Series: Sparrow® by Antenna Design

Open Table Clamp Mount  Sparrow desktop LED light with open table clamp mount  Panel Table Clamp Mount  Sparrow desktop LED light with panel table clamp mount  Sparrow desktop LED light with panel table clamp mount	type	description
	Open Table Clamp Mount	Sparrow desktop LED light with open table clamp mount
Antonio Provi Sida Manua. Sensona di altra LED linha vith Antonio homo identami	Panel Table Clamp Mount	Sparrow desktop LED light with panel table clamp mount
Antonia Donia Cila Manust		
Antenna beam side mount Sparrow desktop LED light with Antenna beam side mount	Antenna Beam Side Mount	Sparrow desktop LED light with Antenna beam side mount
Freestanding Base Sparrow desktop LED light with freestanding base	Freestanding Base	Sparrow desktop LED light with freestanding base
Occupancy sensor Universal occupancy sensor	Occupancy sensor	Universal occupancy sensor

pattern no.	list pri
LED 1 S CLMP	\$43
LED 1 S PCLMP	46
	**
LED 1 S SIDE	46
LED 1 C DACE	Ar.
LED 1 S BASE	47
LED 1 S BASE	47
LED 1 S BASE	47
LED 1 S BASE	4'
LED 1 S BASE	4

Order Cod	de	Ordering Information	Additional Information	Light Source Information	
Example:	LED-1-S-CLMP-111	Specify:  1. Pattern number 2. Mount 3. Finish Finish Options: Black (111) White (118)	ED 1. Pattern number white finish with stainless strods.  2. Mount 3. Finish Occupancy sensor (LED PIR be added to any LED light and be ordered separately.  Black (111)	MP-111 Specify: Sparrow is available in a black or 9 watts	9 watts single multichip LED.
LED	LED				50,000 hours lifespan.
1	Sparrow			rous.	
S	Standard			Occupancy sensor (LED PIR) can	
CLMP	Open Table Clamp Mount				
111	Black			UL Certified.	
		Open table clamp for use on open edge work surface and with minimum of 1 1/16" from back edge of work surface to wall, screen or panel. Work surface thickness minimum of 0.7", maximum of 1.5".			
			Panel table clamp for use with minimum of 3/16" from back edge of work surface to wall, screen or panel. Work surface thickness minimum of 0.9", maximum of 1.7".		

14

leight Range	Construction	Design Awards
articulates 18° to 90°	Lamp: LED, cast aluminum	Best of NeoCon 2013 Silver Award.
Table clamp: 2.5" to 21.4" Antenna beam side: 3.5" to 22.3"	housing, stainless steel frame and plastic reflector and lens.	Sparrow is TAA compliant.
Freestanding: 4.3" to 23.2"	Table clamp mount: steel.	
	Antenna beam side mount: die cast aluminum.	
	Freestanding base: plastic and cast iron.	
	Occupancy sensor: extruded aluminum body, plastic face, end caps and lens.	

15

## LED Light Series: Highwire® by Antenna Design

type	description
19" Undercabinet Light	19" Highwire under-cabinet LED light with power source
37" Undercabinet Light	37" Highwire under-cabinet LED light with power source
67" Undercabinet Light	67" Highwire under-cabinet LED light with power source
79" Undercabinet Light	79" Highwire under-cabinet LED light with power source
Undercabinet Light Adder	19" Highwire under-cabinet LED light adder with connector cable
	37" Highwire under-cabinet LED light adder with connector cable 67" Highwire under-cabinet LED light adder with connector cable
Occupancy sensor	Universal occupancy sensor

Order Co	de	Ordering Information	Additional Information	Light Source Information
LED	LED Highwire Adder Length Connector Finish	Specify:  1. Pattern number 2. Type of light 3. Length 4. Connector where required 5. Finish  Type of Light: Individual: Ships with power source Adder: Ships without power source for interconnection purposes Highwire can be interconnected up to a maximum of 60 watts	screw-in mounts.  Occupancy sensor (LED PIR) can be added to any light and must be  37": 16 watts 67": 30 watts 79": 32 watts	19": 9 watts, 35 LEDs. 37": 16 watts, 70 LEDs. 67": 30 watts, 126 LEDs. 79": 32 watts, 140 LEDs. 50,000 hours lifespan.
		Connector  01: In-line 03: 3" 12: 12" 24: 24" 36: 36"  Finish Options: Black (BLK) Silver (SLV)		

pattern no.	list p
LED 2 IN 19	\$3
LED 2 IN 37	5
LED 2 IN 67	7
LED 2 IN 79	g
LED 2 AD 19	2
LED 2 AD 37 LED 2 AD 67	<u>4</u>
EED 2 AD 01	

Construction	Design Awards
Highwire: LEDs, extruded	Best of NeoCon
aluminum housing, plastic reflector end caps.	Highwire is TA
Occupancy sensor: extruded aluminum body, plastic face, end caps and lens.	

Best of NeoCon 2013 Silver Award.
Highwire is TAA compliant.

## LED Light Series: T- light by Antenna Design

type description

13" T-light

13" T-light with two 19" Highwire lights

21" T-light

21" T-light with two 19" Highwire lights

Order Co	de	Ordering Information	Additional Information	Light Source Information
Example:	<b>LED-3-13-BLK-130</b> LED	Specify:  1. Pattern number  2. Type of light  3. Height	Specify YCBT for Antenna beam with hole for T-light application.	Each 19" highwire draws 9 watts with 35 LEDs.
3	T-light Height		T-light can only be installed on Antenna workspace beam.	50,000 hours lifespan.
BLK Light Finish	- Finish Options:	All T-lights ship with black Highwire lights.		
		Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Standstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist (611) Metallic Medium (612) Metallic Grey Silver Metallic (613)	UL Certified.	

18

pattern no.	list price
LED 3 13 BLK	\$1,359.

LED 3 21 BLK 1,464.

Construction	Design Awards
T-light structure: die cast aluminum base, extruded aluminum stanchion and steel top channel.	Best of NeoCon 2013 Silver Award. T-light is TAA compliant.
Highwire: LEDs, extruded aluminum housing, plastic reflector	

19

and end caps.

## LED Light Series: Sparrow® International by Antenna Design

type	description
Open Table Clamp Mount	Sparrow desktop LED light with open table clamp mount and power source
Panel Table Clamp Mount	Sparrow desktop LED light with panel table clamp mount and power source
Antenna Beam Side Mount	Sparrow desktop LED light with Antenna beam side mount and power source
Freestanding Base	Sparrow desktop LED light with freestanding base and power source
Occupancy sensor	Universal occupancy sensor

oattern no.	list pric
ED 1 S CLMP I	\$470
ED 1 S PCLMP I	470
ED 1 S SIDE I	470
ED 1 S BASE I	470

Order Co	de	Ordering Information	Additional Information	Light Source Information
Example:	LED-1-S-CLMP-I-CE-	Specify:	Sparrow is available in a black or	9 watts single multichip LED.
111   LED   LEI   1   Spa   S   Star   CLMP   Ope   Mot   I   Inte   CE   Cert	Sparrow Standard Open Table Clamp Mount International Certification/Plug type Black	Spectyy:  1. Pattern number 2. Mount 3. Certification/plug type: CE - Europe and Middle East (not UK or Germany) ENEC - Germany PSE - Japan SAA - Australia UK - UK and Singapore 4. Finish Options: Black (111) White (118)	white finish with stainless steel rods. Antenna mounted Sparrow is available in black finish only. Occupancy sensor (LED PIR) can be added to any LED light and must be ordered separately. UL Certified. Open table clamp for use on open edge work surface and with	50,000 hours lifespan.
		Standard lead times do not apply for International orders, your account manager can request lead times.	minimum of 11/16" from back edge of work surface to wall, screen or panel. Work surface thickness minimum of 0.7", maximum of 1.5".  Panel table clamp for use with minimum of 3/16" from back edge of work surface to wall, screen or panel. Work surface thickness minimum of 0.9", maximum of 1.7".	

20

Height Range	Construction	Design Awards
Articulates 18° to 90°	Lamp: LED, cast aluminum housing, stainless steel frame and plastic reflector and lens.	Best of NeoCon 2013 Silver Award.
<ul> <li>Table clamp: 2.5" to 21.4"</li> <li>Antenna beam side: 3.5" to 22.3"</li> </ul>		Sparrow is TAA compliant.
• Freestanding: 4.3" to 23.2"	Table clamp mount: steel.	
	Antenna beam side mount: die cast aluminum.	
	Freestanding base: plastic and cast iron.	
	Occupancy sensor: extruded aluminum body, plastic face, end caps and lens.	

21

## LED Light Series: Highwire® International by Antenna Design

type	description	
19" Undercabinet Light	19" Highwire under-cabinet LED light with power source	
37" Undercabinet Light	37" Highwire under-cabinet LED light with power source	
Undercabinet Light Adder	19" Highwire under-cabinet LED light adder with connector cable	
	37" Highwire under-cabinet LED light adder with connector cable	
Occupancy sensor	ensor Universal occupancy sensor	

Order Cod	de	Ordering Information	Ordering Information	Additional Information
Example: LED 2 IN 19 I CE BLK	LED-2-IN-19-I-CE-BLK LED Highwire Individual Length International Certification/ Plug type Finish	Specify:  1. Pattern number 2. Type of light 3. Length 4. Connector where required 5. Certification/Plug type:     CE-Europe and Middle East (not     UK or Germany)     UK-UK and Singapore 6. Finish  Type of Light: Individual: Ships with power source Adder: Ships without power source for interconnection purposes  Connector  01: In-line 03: 3" 12: 12" 24: 24" 36: 36" If IN line type, leave connector blank  Finish Options: Black (BLK) Silver (SLV)	Standard lead times do not apply for International orders, your account manager can request lead times.	Light ships with magnet and wood screw-in mounts.  Occupancy sensor (LED PIR) can be added to any light and must be ordered separately.  Occupancy sensor requires an additional 4.5" of clearance in addition to the length of the light.

pattern no.	list price
LED 2 IN 19 I	\$314.
LED 2 IN 37 I	523.
LED 2 AD 19	267.
LED 2 AD 37	476.
LED PIR	99.

Light Source Information	Construction	Design Awards
19": 9 watts, 35 LEDs.	Highwire: LEDs, extruded	Best of NeoCon 2013 Silver Award.
37": 16 watts, 70 LEDs. 67": 30 watts, 126 LEDs.	aluminum housing, plastic reflector end caps.	Highwire is TAA compliant.
79": 32 watts, 140 LEDs.	Occupancy sensor: extruded	
50,000 hours lifespan.	aluminum body, plastic face, end	

## LED Light Series: T- light International by Antenna Design

type description

13" T-light

13" T-light with two 19" Highwire lights

21" T-light

21" T-light with two 19" Highwire lights

 -0	
6	

Order Co	de	Ordering Information	Ordering Information	Additional Information
Example: LED	LED-3-13-BLK-I-CE-130	Specify: 1. Pattern number	Standard lead times do not apply for International orders, your account	Specify YCBT for Antenna beam with hole for T-light application.
3 13 BLK	T-light Height Light Finish	<ol> <li>Type of light</li> <li>Height</li> <li>Certification/ Plug type:         CE-Europe and Middle East (not UK or Germany)     </li> </ol>	manager can request lead times.	T-light can only be installed on Antenna workspace beam. All T-lights ship with black
CE 130	International Certification/ Plug type Frame Finish	UK-UK and Singapore 5. Frame Finish		Highwire lights. UL Certified.
		Finish Options:  Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Standstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist (611) Metallic Medium (612) Metallic Grey Silver Metallic (613)		

24

pattern no.	list price
LED 3 13 BLK I	\$1,359.

LED 3 21 BLK I 1,464.

ight Source Information	Construction	Design Awards
Each 19" highwire draws 9 watts vith 35 LEDs. 50,000 hours lifespan.	T-light structure: die cast aluminum base, extruded aluminum stanchion and steel top channel. Highwire: LEDs, extruded aluminum housing, plastic reflector and end caps.	Best of NeoCon 2013 Silver Award.

## Copeland $^{TM}$ Light by Stephan Copeland

Ordering Information

2. Finish for arm

1. Pattern number for arm

3. Mounting option pattern number
4. Mounting option finish

Specify:

Order Code

Example: COPE-01-SV,COPE-01-

COPE-01- Copeland light standard SV arm in silver

COPE-01- Copeland standard base BASE-SV in silver

BASE-SV

product	description
Standard Arm	<ul> <li>Standard Arm.</li> <li>13 watt ENERGY STAR rated compact fluorescent bulb.</li> <li>Mounting option must be ordered separately.</li> <li>20.75"h x 21.75"w (at 90° angle)</li> <li>Reaches height fo 29.75" when extended up and depth of 35.75" when extended out.</li> </ul>
Shown with base	
Compact Arm	<ul> <li>Compact Arm.</li> <li>13 watt ENERGY STAR rated compact fluorescent bulb.</li> <li>Mounting option must be ordered separately.</li> <li>16.25"h x 17.75"w (at 90° angle)</li> <li>Reaches height of 23.5" when extended up and depth of 28.75" when extended out.</li> </ul>
Shown with base	
Replacement bulb	ENERGY STAR 13 watt replacement compact fluorescent bulb (fits compact and standard lights)
Mounting Options	Standard base  • To be used with standard arm only.
	Compact base  • To be used with compact arm only.
	Table clamp  • To be used with either size arm.  • Works on desks of up to 1 <sup>3</sup> / <sub>4</sub> " thick.
	<ul> <li>Slat Wall mount.</li> <li>To be used with either size arm.</li> <li>Can be used on all Knoll systems slat wall as Well as Orchestra® slat boards and load bars.</li> </ul>

Finish Options: Silver (SV) Black (111)

26

co
cc
co
co
co
Co

oattern no.	list price
COPE-01-()	\$218
COPE-02-()	204.
COPEBULB	14.
COPE-01-BASE-()	119.
SOFE-UI-DASE-()	117.
COPE-02-BASE-()	112.
COPE-CLMP-()	67.
()	
COPE-SLT-()	99.
OOI E-0E1-( )	99.

Construction	Design Awards
The Copeland Light has a steel arm, aluminum axles, zinc coated cast iron base and metallic-painted ABS shade.	Best of NeoCon 2005, Silver Award

27

Light Bulb Information

Ships with a 13 watt compact fluorescent light bulb. This is equivalent light output of a 75 watt incandescent light bulb.

May 120v/2700K, UL listed, ENERGY STAR rated.
An incandescent light bulb can also be used. 75 watt is the maximum for the standard light and 60 watt is the maximum for the compact light.

the compact light.

• See above for bulb replacement.

## Power Series Power Cube by Antenna Design

item	description
Power Cube, hard wired	24" square table with electrical outlets on one side
	24" square table with electrical outlets on two sides
	24" square table with electrical outlets/USB on one side
	24" square table with electrical outlets/USB on two sides
	36" square table with electrical outlets on one side
	36" square table with electrical outlets on two sides
Ť	36" square table with electrical outlets/USB on one side
	36" square table with electrical outlets/USB on two sides
Power Cube, cord set	24" square table with electrical outlets on one side
	24" square table with electrical outlets/USB on one side
	36" square table with electrical outlets on one side
	36" square table with electrical outlets/USB on one side
2	
Power Cube, no power	24" square table without power
•	36" square table without power
Markerboard Cleaning Cloth	40 x 30 cm microfiber cloth
Markers	Set of 4 markers
Magnetic Accessory Cup	Optional cup to hold dry erase markers and microfiber cloth eraser and/or personal device power cords; magnetic application can be applied to any side of the Power Cube

pattern no.	list price
ACT-PW-PC-24-24-13-1E	\$1,986.
ACT-PW-PC-24-24-13-2E	2,196.
ACT-PW-PC-24-24-13-1EUSB	2,300.
ACT-PW-PC-24-24-13-2EUSB	2,509.
ACT-PW-PC-36-36-13-1E	2,300.
ACT-PW-PC-36-36-13-2E	2,509.
ACT-PW-PC-36-36-13-1EUSB	2,614.
ACT-PW-PC-36-36-13-2EUSB	2,823.
ACT-PW-PC-24-24-13-1C	1.986.
ACT-PW-PC-24-24-13-1CUSB	2,300.
ACT-PW-PC-36-36-13-1C	2,300.
ACT-PW-PC-36-36-13-1CUSB	2,614.
ACT-PW-PC-24-24-13-X	1,777.
ACT-PW-PC-36-36-13-X	2,091.
ACT-CB-M-CLOTH	15.
ACT-CB-M-MARKER	27.
ACT-CUP-MG	136.

Order Co	de	Ordering Information	General Notes	Construction
Example:  ACT PW PC 36-36-13 1E	ACT-PW-PC-36-36-13-1E  Activity Spaces Power Collection Power Cube 36"x36"x13" Electrical outlets on one side	Specify:  1. Pattern number  Finish note: Power Cube finish is white markerboard paint.  Optional Magnetic Accessory Cup must be specified in one of the following finishes:  Code: Description 111 Jet Black 115 Medium Grey 118 Bright White 130 Dark Red 131 Slate Blue	Each electrical module has either 4 outlets or 3 outlets and 2 USB ports, depending on specification.  Power Cube is 13" high with 4 levelers. Hard wired comes with 72" whip. Cord set comes with 72" cord with a 3-prong plug for 120V outlets. Base includes one slot per corner for choice of cord exit.	Power Cube: Powder coated steel, steel and nylor levelers  Magnetic Accessory Cup: See page 42.

28

Note: Each Power Cube comes with a whiteboard finish and ships with 4 dry erase markers (blue, green, red and black) and a microfiber cloth eraser.

To prevent dry erase markers from drying out, store them with the cap down in the optional cup.

Power Disc: Max Load: 120V, 15A, 50/60 Hz

Voltage Protection Rating: L-N 600V, L-G 600V, N-G 600V

UL Listed Relocatable Power Tap/ Surge Protection Device

10' 3-prong cord recesses in base for flat surfaces or can be threaded through standard grommet.

on/off switch with LED indicator

Unit weighs 4.3 lbs.

Made in China for Knoll.

Power Series Power Disc by Antenna Design

item
Power Disc description

9" round Power Disc with six 15-amp electrical outlets



Order Co	de	Ordering Information	Additional Information			
Example:	ACT-PW-TAB-9-EL	Specify:	Max Load: 120V, 15A, 50/60 Hz			
ACT	Activity Spaces	1. Pattern number	Valence Dustantian Patinon			
PW	Power Series	Finish note: White gloss plastic, green LED indicator, white cord	Voltage Protection Rating: L-N 600V, L-G 600V, N-G 600V			
TAB	Power Disc tabletop module		UL Listed Relocatable Power Tap/ Surge Protection Device			
EL	Electrical (120v)	_	O .			
		_	10' 3-prong cord recesses in base for flat surfaces or can be threaded through standard grommet.			
			On/off switch with LED indicator			
			Unit weighs 4.3 lbs.			
			Made in China for Knoll.			

30

list price pattern no. \$399. ACT-PW-TAB-9-EL

brushed steel and brushed zinc

\$141.

black oxide

\$131.

## The Smokador<sup>TM</sup> Collection Exec Rectilinear accessories

product	description	W	d	h	wgt.
Memo Box	Matte black interior. Includes 4" x 6" memo paper. Non-skid rubber pad on bottom.	41/4"	6 1/4"	5/8"	1 lb. 4 ozs.
Business Card Holder	Felt base. Available in black oxide only.	31/2"	2"	2"	6 ozs.
Round Pencil Cup	Matte black interior. Non-skid rubber pad on bottom.	3 1/8"		3 1/2"	9 ozs.
Round Clip Cup	Matte black interior. Non-skid rubber pad on bottom.	3"		2"	8 ozs.
3					
Single Letter Tray	Legal size. Matte black interior with black linoleum floor pad. Recessed rubber feet and black felt bottom prevent scuffing.	10"	15"	2 1/4"	4 lbs. 5 ozs.
Double Letter Tray	Legal size. Matte black interiors with black linoleum floor pads and matte black posts. 2 ½ between trays. Recessed rubber feet and black felt bottom prevent scuffing. Ships fully assembled.	10"	15"	61/2"	9 lbs. 2 ozs.

Business Card Holder	Felt base. Available in black oxide only.	3 1/2"	2"	2"	6 ozs.	1906	95.
ound Pencil Cup	Matte black interior. Non-skid rubber pad on bottom.	3 1/8"		3 ½"	9 ozs.	1915	104.
ound Clip Cup	Matte black interior. Non-skid rubber pad on bottom.	3"		2"	8 ozs.	1916	122.
ngle Letter Tray	Legal size. Matte black interior with black linoleum floor pad. Recessed rubber feet and black felt bottom prevent scuffing.	10"	15"	2 1/4"	4 lbs. 5 ozs.	1901	217.
ouble Letter Tray	Legal size. Matte black interiors with black linoleum floor pads and matte black posts. 2½" between trays. Recessed rubber feet and black felt bottom prevent scuffing. Ships fully assembled.	10"	15"	61/2"	9 lbs. 2 ozs.	1901-2	487.

pattern no.

1905

Order Co	de	Ordering Information	Custom Options	Construction
Example: 1905 BO	1905-BO Memo box Black oxide	Specify:  1. Pattern number 2. Finish  Metal finishes: Black Oxide (BO) Brushed Steel (BS)	Special sized letter and memo trays available. 100 piece minimum per line item.  Custom finishes available upon sample chip approval. 25 piece minimum per line item. Production set up fee varies by product. Contact your Knoll sales representative or Customer Service for complete pricing information.	Black oxide finish is a matte black hand-applied coating over steel. Brushed steel is brushed steel with a lacquer finish.

32

244.

### The Smokador<sup>TM</sup> Collection Exec Rectilinear waste baskets

product	description	W	d	h	wgt.
Round Wastebasket	Black oxide exterior with matte black interior. Non-toxic. 15 qt. capacity.	10"		$14^{3}/4''$	5 lbs.
Rectilinear Wastebasket	Black oxide exterior with matte black interior. Non-toxic. 24 qt. capacity.	8"	13"	131/2"	7 lbs.
	non-toxic. 24 qt. capacity.				

pattern no.			blac
050			

Corder CodeOrdering InformationCustom OptionsConstructionExample:050-BOSpecify:Custom finishes available upon sample chip approval. 750 piece minimum on plated finishes; 100 piece minimum on painted finishes.Metal Wastebaskets: Black oxide finish is a matte black minimum on painted finishes.BOBlack OxideFinish(when applicable)Production set up fee varies by finish. Contact your Knoll sales representative or Customer Service for complete pricing information.

Manufactured in the United States.

055-BO

34

### The Smokador<sup>TM</sup> Collection Leatheraccessories

product	description	type	w	d	h	wgt.
Single Letter Tray	Legal size. Suede bottom.		111/4"	151/4"	2"	3 lbs.
Memo Box	Includes 4" x 6" memo paper. Suede bottom.		5 1/4"	7 1/4"	3/4"	1 lb.
Pencil Cup	Suede bottom.		37/16"	37/16"	41/8"	1 lb.
Coasters	Set of four. Circular leather or black linoleum. Felt	Leather		3 1/4"		4 ozs. (set)
	bottom.	Linoleum		3 1/4"		4 ozs. (set)
Round Wastebasket	Black interior. Steel covered with leather.		10"		15"	6 lbs.

pattern no.	linoleum	Vicenza
3301		\$445
		272
3305		272.
3315		251.
3319-4		105.
3319-4-LN	57.	100.
3650		627.



Order Code **Ordering Information** Construction Spinneybeck Vicenza (VZ):
A corrected grain, aniline dyed leather. The correction process refines the surface of the leather Example: 3315-VZ BLK Specify: There are 20 rich colors available in Vicenza. To view the complete color selection, please contact your Knoll Pencil Cup 3315 1. Pattern number 2. Leather selection VZ BLK Vicenza Black sales representative or Spinneybeck.  $Spinney beck\ leathers:$ 

36

Please note that 10 or more units are required on all Spinneybeck orders.

Vicenza (VZ)

preparing it for the reception of an embossed grain pattern prior to finishing.

Manufactured in the United States, using domestic and Spinneybeck Italian leathers.

### The Smokador<sup>TM</sup> Collection Desk Pads

product	description	W	d	wgt.
Rectilinear Desk Pad	Black linoleum with felt back. Rectilinear edge detail	. 34"	20"	4 lbs.
	No side panels.	38"	24"	5 lbs.
Radiused Desk Pad	Black linoleum with felt back. Radiused edge detail.	23"	17"	3 lbs. 8 ozs.
	No side panels.	30"	18"	3 lbs. 12 ozs.
		34"	20"	4 lbs.
		38"	24"	5 lbs.
Rectilinear Conference Pad	Leather or black linoleum. Black felt back.	18"	12"	1 lb. 6 ozs.
		18"	12"	3 lbs. 6 ozs.
		7.0%	7.0%	
Oval Conference Pad	Black linoleum with black felt back.	18"	12"	1 lb. 4 ozs.

pattern no.	Black Linoleum	Vicenza
1912-30	\$177.	
1912-40	204.	
012-1	147.	
012-2	167.	
012-3	189.	
012-4	209.	
1912-20	99.	
3313	99.	329.
3010		32).
512-20	99.	

Ord	er Co	ode	Ordering Information
			~

Example: **1912-30** 

1912-30 Rectilinear Desk Pad

Specify:

Pattern number
 Finish(when applicable)

Spinneybeck leathers: Vicenza (VZ)

There are 20 rich colors available in Vicenza. To view the complete color selection, please contact your Knoll sales representative or Spinneybeck.

Please note that 10 or more units are required on all Spinneybeck orders.

38

Additional linoleum colors Additional linoleum colors available. Special sizes available up to 34"W x 28"D. 50 piece minimum on all custom desk pads. Contact your Knoll sales representative or Customer Service for complete pricing information.

Customer's own leather (COL) available upon approval of sample.
10 unit minimum on all specials.
Upcharges based on number of cowhides required for production.
Contact your Knoll sales
representative or Customer Service
for complete pricing information. Manufactured in the United States.

list price

## The Smokador<sup>TM</sup> Collection Replacement Parts

product	description	d	h
Metal Letter Tray Stacking Posts	4 per set, with screws. For use with the Contemporary Leather and Exec Rectilinear Collections. Available in mirror chrome, mirror brass, and matte black only.	1/4"	41/4"
Letter Tray Stacking Post Threaded	4 per set. For use with stacking posts for the		
Rods	Contemporary Leather and Exec Rectilinear		
	Collections.		

001-214	\$38.
001-315	8.

pattern no.

### Order Code

## Example: 001-214-MC 001-214 Metal letter tray stacking posts MC Mirror chrome

Ordering Information

Specify:
1. Pattern number
2. Finish (except Threaded Rods)

Metal letter tray post finishes: Mirror Brass (MB) Matte Black (BK)

## KnollExtra Magnetic Accessory Cup Antenna Design

product	description	diameter	overall height	weight
Magnetic Accessory Cup	Large accessory cup for application to any magnetic surface. Fits dry erase markers, power cords, etc. Interior diameter is 3.7"; interior height is 4.4".	4"	6"	1.1 lbs.

Pattern number list price
ACT-CUP-MG \$136.

43

Order Code	Ordering Information	Construction	
Example: ACT-CUP-MG ACT-CUP- Magnetic accessory cup MG 118 Bright White	Specify:  1. Pattern number 2. Finish  Finish:  Code: Description 111 Jet Black 115 Medium Grey 118 Bright White 130 Dark Red 131 Slate Blue	Die cast aluminum with textured powder coat paint, wool felt insert, neodymium magnets and steel fasteners.  Pacemakers and items sensitive to magnetic fields should be kept 3.5" from product.	Note: A non-magnetic version of this accessory cup is available on Interpole (Replace MG in pattern code with IP, see Antenna Workspaces price list for pricing) and Scribe Mobile Markerboards (see page 194 for specifications an pricing).  To prevent dry erase markers from drying out, store them with the cap down. To protect magnetic surface, avoid dragging the cup when repositioning.

## Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel letter trays

product	description	W	d	h	wgt.
Front Letter Single Tray	Single tray. Non-scuffing rubber feet.	101/4"	13"	23/4"	1 lb. 2 ozs.
Front Letter Double Tray	Double tray. Non-scuffing rubber feet. Removable stacking brackets included.	101/4"	13"	7 1/4"	2 lbs. 5 ozs.
Side Letter Single Tray	Single tray. Non-scuffing rubber feet.	131/4"	91/2"	23/4"	1 lb. 7 ozs.
Side Letter Double Tray	Double tray. Non-scuffing rubber feet. Removable stacking brackets included.	131/4"	91/2"	7 1/4"	2 lbs. 15 ozs.
Side Legal Single Tray	Single tray. Non-scuffing rubber feet.	151/2"	91/2"	23/4"	2 lbs.

pattern no.	translucent colors list price	opaque colors list price
ORCH-F-LT	\$53.	\$43.
ODOU 5 LT	107	
ORCH-F-LT	107.	92.
DRCH-S-LT	53.	43.
ORCH-S-LT	107.	92.
DDOUG LOT		
DRCH-S-LGT	65.	56.

Order Code	Ordering Information	Custom Options	
Example: ORCH-F-LT-BK ORCH-F- Front letter tray LT BK Black	Specify:  1. Pattern number 2. Finish  Opaque plastic finishes: Black (BK)	Custom colors available upon sample chip approval. \$364 color match fee and 500 piece minimum per line item.	
	Medium Grey (DG) Soft Grey (E)  **Translucent K-resin finish: Clear (CL)		
	Letter trays mounted on slat wall or load bars accommodate up to max. 15lbs of weight.		
		44	

 Construction
 Design Awards

 Opaque plastic finishes:
 Permanent Collection of the Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

## Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel letter trays

description	W	d	h	wgt.
Double tray. Non-scuffing rubber feet. Removable stacking brackets included.	151/2"	91/2"	7 1/4"	4 lbs. 1 oz.
Set of four stacking brackets for all Orchestra letter	<sup>3</sup> / <sub>4</sub> "	1/2"	2"	1 oz. (set)
	Double tray. Non-scuffing rubber feet. Removable stacking brackets included.	Double tray. Non-scuffing rubber feet. Removable stacking brackets included.  Set of four stacking brackets for all Orchestra letter 3/4"	Double tray. Non-scuffing rubber feet. Removable stacking brackets included.  Set of four stacking brackets for all Orchestra letter 3/4" 1/2"	Double tray. Non-scuffing rubber feet. Removable stacking brackets included.  Set of four stacking brackets for all Orchestra letter 3/4" 1/2" 2"

pattern no.	translucent colors list price	opaque colors list price
20RCH-S-LGT	\$127.	\$111.
ORCH-SB	6.	5.

Order Code	Ordering Information	Custom Options
Example: ORCH-F-LT-BK ORCH-F- Front letter tray LT BK Black	Specify:  1. Pattern number 2. Finish  Opaque plastic finishes: Black (BK) Medium Grey (DG) Soft Grey (E)  Translucent K-resin finish: Clear (CL)  Letter trays mounted on slat wall or load bars accommodate up to max. 15lbs of weight.	Custom colors available upon sample chip approval. \$364 color match fee and 500 piece minimum per line item.
		46

Construction

Opaque plastic finishes: Sturdy polystyrene plastic in matte, textured finish. Fingerprint resistant.

Translucent finishes: Sturdy K-resin (SBC) plastic.

Manufactured in the United States.

Design Awards

Permanent Collection of the Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

opaque colors list price

## Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel paper management

product	description	W	d	h	wgt.
2-Way Binder Bin	Horizontal or vertical positioning. Excellent for rail-mount, desktop, and overhead storage.	4 7/8"	121/4"	81/4"	1 lb. 6 ozs.
Vertical Paper Pack	Holds memo, letter, legal and unbound EDP size material.	15 ¼″	5"	9"	2 lbs. 1 oz.
Slanted Sorter	Removable dividers tilt left and right.	9"	11"	81/2"	2 lbs. 4 ozs.
File Sorter	Versatile sorter holds small files, stationery, envelopes, messages and other desktop papers.	101/4"	51/2"	5 1/2"	1 lb. 8 ozs.

ORCH-BDN	\$68.	\$60.
ORCH-VPP	73.	68
	-	
ORCH-SSD	73.	68.

translucent colors list price

51.

Order Cod	de	Ordering Information	Custom Options	
Example: ORCH-BDN	ORCH-BDN-DG Binder bin	Specify: 1. Pattern number 2. Finish	Custom colors available upon sample chip approval. \$364 color match fee and 500 piece minimum per line item.	
DG	Medium grey  Opaque plastic finishes: Black (BK) Medium Grey (DG) Soft Grey (E)	Medium Grey (DG)		
		Translucent K-resin finish: Clear (CL)		
			48	

Construction

pattern no.

ORCH-FS

Opaque plastic finishes: Sturdy polystyrene plastic in matte, textured finish. Fingerprint resistant.

Manufactured in the United States.

Translucent finish: Sturdy K-resin (SBC) plastic. Design Awards

Permanent Collection of the Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

### Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel hanging file holders, pencil cup, utility trays, tape dispenser and memo tray

product	description	w	d	h	wgt.
Hanging File Holders	2 per set. Attach to rail and hold legal or letter size hanging folders for easy access. Not for use on Currents slat wall.	1"	8"	1"	8 ozs. (pair)
Pencil Cup	Three compartments for pencils, $4'' \times 6''$ memo paper, and large Post-It <sup>TM</sup> Notes.	5"	3"	4"	7 ozs.
Utility Tray	6 versatile compartments hold pencils, paper clips, and other paper management items. Largest compartment is $3'' \ge 8^1\!/4''$ .	12"	7"	1"	12 ozs.
Tape Dispenser	Holds standard, clear tape (not included).	1"	4 1/2"	3 1/2"	3 ozs.
Memo Tray	Includes $4'' \times 6''$ memo paper. Non-scuffing rubber feet.	6"	4"	1"	9 ozs.

pattern no.	translucent colors list price	opaque colors list price
ORCH-HFH		\$50
DRCH-PC	31.	27
DRCH-UT	38.	36
ORCH-TD	25.	24
ORCH-MT	31.	27

Order Code	Ordering Information	Custom Options
Example: ORCH-PC ORCH-PC Pencil cup CL Clear	Specify: 1. Pattern number 2. Finish 3. Divider finish(mini-shelf only)	For plastic accessories, custom colors available upon sample chip approval. \$364 color match fee and 500 piece minimum per line item.
	Opaque plastic finishes: Black (BK) Medium Grey (DG) Soft Grey (E)	
	Translucent K-resin finish: Clear (CL)	
	Hanging file holder metal finishes: Black (BK)	
	DIACK (DK)	50

Construction Hanging file holders: Medium grey painted aluminum or black anodized aluminum. Mini-shelf dividers are poly-styrene plastic. Pencil cup and utility tray: Sturdy polystyrene plastic in a matte,textured finish. Fingerprint resistant.

Translucent finishes: Sturdy K-resin (SBC) plastic.

Manufactured in the United States.

**Design Awards** Permanent Collection of the Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

opaque colors list price

# Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel bud vase, telephone shelf, desk pads and waste baskets

product	description	W	d	h	wgt.
Bud Vase	Available in black and clear. Rail-mounted only.	2"	2"	7"	3 ozs.
Telephone Shelf	Holds virtually any standard office telephone. Available in black only.	12"	111/2"	2"	3 lbs. 12 ozs.
Racetrack Desk Pad	Black linoleum with felt back.	30"	18"		5 lbs.
Wastebasket	Freestanding. 24 qt. capacity.	81/2"	14"	147/8"	4 lbs. 6 ozs.
Recycling Wastebasket	Blue recycling color for desk-side separation of waste materials. Includes recycling stickers. Freestanding. 24 qt. capacity.	81/2"	14"	147/8″	4 lbs. 6 ozs.

pattern no.	list	opaque colors list price
ORCH-VAS		\$27
		105
DRCH-TS-UNI		105
DRCH-DP	101.	
PRCH-WBK	114.	
ORCH-WBK-R-EB	114.	

pattern no.

Order Cod	de	Ordering Information	Custom Options	
Example: ORCH- VAS BK	ORCH-VAS Bud Vase Black	Specify: 1. Pattern number 2. Finish (When applicable)  Acrylic vase finishes: Black (BK) Clear (CL)  Telephone Shelf finishes: Black (BK) Medium Grey (DG)	For plastic accessories, custom colors available upon sample chip approval. \$364 color match fee and 500 piece minimum per line item.	

<b>Custom Options</b>	Construction	Construction	Design Awards
Additional desk pad colors available. Special sizes available up to 34"W x 28"D. 50 piece minimum on all custom desk pads. Custom wastebasket colors available upon sample chip approval. \$359 color match fee and 750 minimum per line item. Contact your Knoll sales representative or Customer Service for complete pricing information.	Translucent finish: Sturdy K-resin (SBC) plastic.  Bud vase: Acrylic with black polystyrene holder.  Telephone shelf: 16-gauge painted steel.  Bud vase is manufactured in Taiwan, Republic of China. All other items are manufactured in the United States.	Desk pad: Black linoleum with felt black Wastebasket: Polypropylene with matte textured finish. Manufactured in the United States.	Permanent Collection of the Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

### Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel load bar/info rail

product	description	W	d	h	wgt.
Load Bar/Info Rail	Fits virtually every office system.	24"	1/2"	3"	1 lb. 9 ozs.
	<ul> <li>Mounts on panel, stanchion, wall or freestanding</li> </ul>	30"	1/2"	3"	2 lbs.
	desk.	35"	1/2"	3"	2 lbs. 6 ozs.
* 7	<ul> <li>Info Rail underside holds memos and notes for easy access.</li> </ul>	36"	1/2"	3"	2 lbs. 9 ozs.
	Black plastic end caps.	42"	¹/2"	3"	3 lbs.
	Wall, stanchion or panel-mounted brackets	45"	¹/2"	3"	3 lbs. 2 ozs.
	included in list price (see mounting options page).	48"	¹/2"	3"	3 lbs. 4 ozs.
		54"	1/2"	3"	4 lbs.
		60"	1/2"	3"	4 lbs. 5 ozs.
		66"	1/2"	3"	4 lbs. 8 ozs.
		72"	1/2"	3"	4 lbs. 12 ozs.
Load Bar/Info Rail Morrison		11 5/8"	1/2"	3"	
Network 2		175/8"	1/2"	3"	
		23 5/8"	1/2"	3"	
		295/8"	1/2"	3"	
		35 1/8"	1/2"	3"	
		41 5/8"	1/2"	3"	
		47 5/8"	1/2"	3"	
		53 1/8"	1/2"	3"	
		595/8"	1/2"	3"	
Dividends and Caliber Stanchion	(Note: Dividends End Panels including sliding door	31 5/8"	1/2"	3"	
Mounted Load Bar	overdesks do not support load bars.)	37 5/8"	1/2"	3"	
	,	43 5/8"	1/2"	3"	
		55 5/8"	1/2"	3"	
		675/8"	1/2"	3"	

pattern no.	list
OR-LBI-24-( )( )	\$103.
OR-LBI-30-( )( )	103.
OR-LBI-35-( )( )	110.
OR-LBI-36-( )( )	110.
OR-LBI-42-( )( )	122.
OR-LBI-45-( )( )	136.
OR-LBI-48-( )( )	136.
OR-LBI-54-( )( )	150.
OR-LBI-60-( )( )	157.
OR-LBI-66-( )( )	174.
OR-LBI-72-( )( )	203.
OR-LBI-24-N2-( )( )	90.
OR-LBI-30-N2-()()	97.
OR-LBI-36-N2-()()	103
OR-LBI-42-N2-()()	103
OR-LBI-48-N2-()()	110
OR-LBI-54-N2-()()	122.
OR-LBI-60-N2-()()	136.
OR-LBI-66-N2-()()	150.
OR-LBI-72-N2-( )( )	157.
OR-LBI-36-DV-( )( )	70.
OR-LBI-42-DV-( )( )	85.
OR-LBI-48-DV-()()	100.
OR-LBI-60-DV-()()	118
OR-LBI-72-DV-( )( )	150
OIT-EDI-12-04-( )( )	130.

Order Cod	Ore	
Example:	OR-LBI-36-111	Spe
	OR-BKT-PM-R	1.
OR-LBI-36	36 "load bar	2.
111	Black	3.
OR-BKT-	Panel-mounted bracket	4.
PM-R	for Reff	Spe

### **Ordering Information**

Anodized aluminum finish: Silver Anodized (SV)

ecify: Painted Core aluminum finishes: Medium Grey (115) Pattern number Soft Grey (117) System Suffix Black (111)
Beige Mist Metallic (611) Finish Mounting Option Brown (112) Dark Grey (113) pecial sizes and small quanity orders may be painted Folkstone Grey (114) Sandstone (116) Bright White (118)

54

Medium Grey Metallic (612)

Painted Legacy aluminum finishes are still available for existing customers only:
Medium Metallic Grey (DG) Soft Grey (E) Warm Putty (WP) Flint (F) Black (BK)

**Mounting Options** Please note flat panel monitor arms cannot be mounted on Orchestra® load bars. Flat panel monitors can be mounted on Orchestra® slat wall only when mounted on an architectural wall. Please see p.128 for flat panel monitor support mount options.

See page 58 for mounting options

### **Custom Options**

Load Bar/Info Rails are available in custom lengths. Please note that for all lengths greater than 66", load bar will be painted, not anodized. Contact your local Knoll Customer Service representative for details.

Load bar/info rail: Corrosion-resistant T-6063 painted or anodized aluminum. End caps are textured polystyrene plastic. Load Bar is filled with 1/2" Delrin plastic pellets to support papers on

Construction

Manufactured in the United States.

**Design Awards** Permanent Collection of the

Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

list price

### Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel slat board 61/2" and 143/4"

product	description	W	d	h	wgt.
Slat board-61/2"	• Fits virtually every office system. Mounts on panel,	24"	1"	61/2"	2 lbs. 9 ozs.
<i>t</i>	stanchion, wall or freestanding desk.	30"	1"	61/2"	3 lbs. 3 ozs.
	• 3 horizontal accessory channels.	35"	1"	61/2"	3 lbs. 13 ozs.
	<ul> <li>Info rail underside holds memos and notes for easy access.</li> </ul>	36"	1"	61/2"	3 lbs. 13 ozs.
Section 1	Wall, stanchion, or panel-mounted brackets	42"	1"	61/2"	4 lbs. 8 ozs.
	included in list price (see mounting options page).	45"	1"	61/2"	4 lbs. 8 ozs.
		48"	1"	61/2"	5 lbs. 2 ozs.
		54"	1"	61/2"	5 lbs. 12 ozs.
		60"	1"	61/2"	6 lbs. 6 ozs.
		66"	1"	61/2"	7 lbs.
		72"	1"	61/2"	7 lbs. 11 ozs.
Slat board-14³/4″	stanchion, wall or freestanding desk.  8 horizontal accessory channels.  Info rail underside holds memos and notes for easy access.  Wall, stanchion, or panel-mounted brackets included in list price (see mounting options page).	24"	1"	143/4"	5 lbs. 2 ozs.
		30"	1"	$14^{3}/4''$	6 lbs. 6 ozs.
using T		35"	1"	143/4"	7 lbs. 1 oz.
COL.		36"	1"	143/4"	7 lbs. 1 oz.
		42"	1"	143/4"	9 lbs.
		45"	1"	143/4"	9 lbs.
		48"	1"	143/4"	10 lbs. 4 ozs.
		54"	1"	143/4"	11 lbs. 8 ozs.
		60"	1"	$14^{3}/4''$	12 lbs. 12 ozs.
		66"	1"	$14^{3}/4''$	14 lbs.
		72"	1"	143/4"	15 lbs. 6 ozs.
Slat board Morrison Network 2		11 5/8"	1"	61/2"	
		175/8"	1"	61/2"	
		23 5/8"	1"	61/2"	
		295/8"	1"	61/2"	
		35 5/8"	1"	61/2"	
		41 5/8"	1"	61/2"	
		47 5/8"	1"	61/2"	
		53 5/8"	1"	61/2"	
		595/8"	1"	61/2"	
		32.0		0.72	

	1
OR-SL-06-24-( )( )	\$157.
OR-SL-06-30-( )( )	183.
OR-SL-06-35-( )( )	210.
OR-SL-06-36-( )( )	210.
OR-SL-06-42-( )( )	233.
OR-SL-06-45-( )( )	261.
OR-SL-06-48-( )( )	261.
OR-SL-06-54-( )( )	286.
OR-SL-06-60-( )( )	312.
OR-SL-06-66-( )( )	337.
OR-SL-06-72-( )( )	365.
OR-SL-14-24-( )( )	416.
OR-SL-14-30-( )( )	460.
OR-SL-14-35-( )( )	503.
OR-SL-14-36-( )( )	503.
OR-SL-14-42-( )( )	554.
OR-SL-14-45-( )( )	608.
OR-SL-14-48-( )( )	608.
OR-SL-14-54-( )( )	659.
OR-SL-14-60-( )( )	712.
OR-SL-14-66-( )( )	763.
OR-SL-14-72-( )( )	818.
OR-SL-06-24-N2-( )( )	105.
OR-SL-06-30-N2-( )( )	128.
OR-SL-06-36-N2-( )( )	157.
OR-SL-06-42-N2-( )( )	183.
OR-SL-06-48-N2-( )( )	210.
OR-SL-06-54-N2-( )( )	233.
OR-SL-06-60-N2-( )( )	261.
OR-SL-06-66-N2-( )( )	286.
OR-SL-06-72-N2-( )( )	312.

Order Code	
Example:	OR-S
	OD E

### OR-BKT-PM-DV OR-SL-06- 42"W x 6 1/2"H slat board 42 DV Dividends suffix 117 Soft grey **OR-BKT-** Panel-mounted bracket for Dividends

### **Ordering Information**

SL-06-42-DV-117-Specify:1. Pattern number 2. System Finish 4. Mounting Option Satin anodized aluminum finish: Satin Anodized Aluminum (SA) includes painted matte black endcap. Special sizes and small quantity orders may be painted

Painted aluminum finishes: Medium Grey (115) Soft Grey (117) Black (111) Beige Mist Metallic (611) Brown (112) Dark Grey (113) Folkstone Grey (114) Sandstone (116)

Medium Grey Metallic (612)

Bright White (118)

56

Painted Legacy aluminum finishes are still available for existing customers only: Medium Metallic Grey (DG) Soft Grey (E) Warm Putty (WP) Flint (F) Black (BK)

Worksurface-mounted bracket: Metal posts attach to underside of worksurface with C-clamp, raising Load Bar 10" above worksurface. Usable on worksurfaces 1 1/8"-1 13/16" thick. Set of 2 brackets. For Slat boards wider than 66", order additional brackets.

For use with load bars and 61/2" slat boards only.

### **Mounting Options**

pattern no.

Please note flat panel monitor arms cannot be mounted on Orchestra® load bars. Flat panel monitors can be mounted on Orchestra® slat wall only when mounted on an architectural wall. Please review before mounting. Please see p.128 for flat panel monitor support mount options.

Dividends Horizon panel mounting Slat board mounts on panel slots which are 5"-71/2" below the top cap, depending on the height of the panel.

Panel, stanchion and wall-mounted brackets:

Wall, stanchion, or panel-mounted brackets are included in the list price.

**Custom Options** 

Slat board is available in custom lengths of up to 96". Please note that for all lengths greater than 66", load bar will be painted, not anodized.

Brackets are currently available for virtually every major office system. Panel-mounted brackets for other systems can be developed. Minimum of 100 sets per bracket. Tooling and set-up charges may be required.

### Construction

Corrosion-resistant T-6063-T5 painted or anodized aluminum. End caps are 11 gauge steel painted matte black.Bottom rail is filled with 1/2" Delrin plastic pellets to support papers on Info Rail.

Worksurface-mounted bracket: Die-cast aluminum painted black

Manufactured in the United States.

# Orchestra® Universal System Accessories by Bruce Hannah & Ayse Birsel mounting options

product

## Mounting Options



Worksurface - Mounted Brackets

description
Panel Mounted Bracket (Deep Universal only). Based on 1" centers. Set of 2.*
Panel Mounted Bracket (Dividends Panel only). Set of 2.*
Panel Mounted Bracket (Morrison only). Set of 2.*
Panel Mounted Bracket (Reff only). Set of 2.*
Panel Mounted Bracket (Shallow Universal only). Based on 1" centers. Set of 2.*
Stanchion-Mounted Bracket (Calibre only). Set of 2.*
Stanchion-Mounted Bracket (Currents workshelf and stanchion). Set of 2.*
Stanchion-Mounted Bracket (Dividends only). Set of 2.*
Wall-Mounted Bracket. Set of 2.*
Worksurface-Mounted Bracket. For load bars and 61/2" slat boards only. Set of 2. Black finish.

<sup>\*</sup> No charge when ordered with Load Bar or Slat board, configured in load bar and slat board pattern numbers when ordered with load bars and slat boards.

Order Code	Ordering Information	Mounting Options	
Example: OR-BKT-SM-A OR-BKT- Worksurface-mounted bracket	Specify: 1. Pattern number 	Panel, stanchion and wall-mounted brackets: Wall, stanchion, or panel-mounted brackets are included in the list price and are specified when ordering pattern number.	Worksurface-mounted bracket: Metal posts attach to underside of worksurface with C-clamp, raising Load Bar 10" above worksurface. Usable on worksurfaces ½"-1½" thick. There should be at least ¾4"-1" of space between the back of the desk and the surface behind (ie. it cannot be flush). Set of 2 brackets. For Load Bars wider than 66", order additional brackets. For use with load bars and 6½" slat boards only.

58

pattern no.	list price
OR-BKT-PM-B *	\$12.
OR-BKT-PM-DV *	12.
OR-BKT-PM-M*	12.
OR-BKT-PM-R *	12.
OR-BKT-PM-D *	12.
OR-BKT-PM-CE *	16.
OR-BKT-PM-CS *	32.
OR-BKT-PM-DS *	16.
OR-BKT-WM*	27.
OR-BKT-SM-A	167.

M	ounting Options
P	lease note flat panel monitor arms
	annot be mounted on Orchestra®
lo	ad bars. Flat panel monitors can
	e mounted on Orchestra® slat wall
01	nly when mounted on an
aı	chitectural wall. Please review
b	efore mounting. Please see
	128 for flat panel monitor support
	ount options.

Worksurface mounted bracket is for use with load bars and 61/2" slat boards only. (143/4" slat board is too large for this application.)

Brackets are currently available for virtually every major office system. Panel-mounted brackets for other systems can be developed.

Minimum of 100 sets per bracket. Tooling and set-up charges may be required. Contact your Knoll sales representative or Customer Service for complete pricing information.

**Custom Options** 

Worksurface-mounted bracket: Die-cast aluminum painted black.

Manufactured in the United States.

Construction

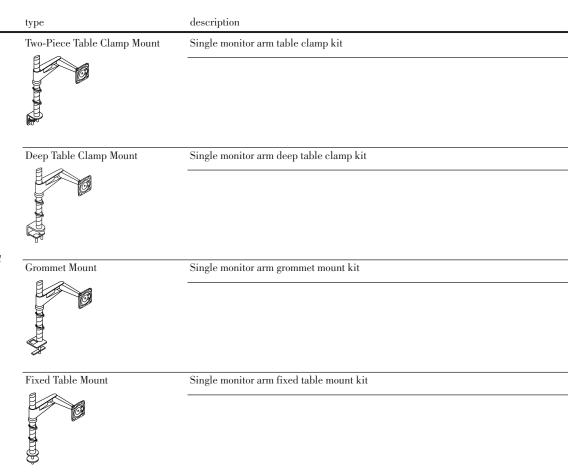
**Design Awards** 

Cooper-Hewitt, National Design Museum, Smithsonian Institution, 1994; ROSCOE Award, Interior Design Magazine, 1991; Outstanding Performance, Product Design Achievement Award, IBD Southern California Chapter, 1991; Bronze Award, IBD Product Design Competition, 1990.

Permanent Collection of the

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Single Arm Kits by Richard Sapper

Kit includes everything needed to mount one monitor to a  $work surface, \, slat \, wall \, or \, wall:$ single standard arm, 16" mast(unless otherwise specified), movement joint (includes fast release monitor plate), adjustment knob, cable management clips and mounting option (see right for options)



pattern no.	silver finish list price	standard finish list price
SAP MAS CLMPK()	\$353.	\$306.
OAD WA O OLMB DD K ( )	200	220
SAP MAS CLMP DP K()	390.	338.
SAP MAS GRMTK()	358.	312
SAP MAS FTM K()	337.	294.

### Order Code

# SA S-C 115 R

## **Ordering Information**

Bright White (118)

Knob Finish Option:

Silver (SILV)

Red (R) Black (B)

Silver Monitor Arm Finish Option:

Silver Compact Arm Finish Option: Silver (613)

xampie:	SAP-IVIA-S-CLIVIP-K-	Specify:
	(115)-(R)	1. Pattern number
AP-MA-	Sapper single standard	2. Finish where required
-CLMP-k	arm table clamp kit	Kits do not require any additional
15	Medium Grey	mounting specifications.
	Red knob	Standard Monitor Arm Finish Options: Jet Black (111) Medium Grey (115)

Antenna table center beam side mount finish options: Jet Black (111) Brown (112)
Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

60

USA made standard single monitor arm kits are available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAAcompliant (Trade Agreements Act).

\* Kits without masts do not require and do not include adjustment knob and cable management clips.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

299.

328.

## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Single Arm Kits by Richard Sapper

Kit includes everything needed to mount one monitor to a  $work surface, \, slat \, wall \, or \, wall: \,$ single standard arm, 16" mast(unless otherwise specified), movement joint (includes fast release monitor plate), adjustment knob, cable management clips and mounting option (see right for options)

description type

Dividends Horizon Benching Mount Single monitor arm Dividends Horizon benching mount kit



Antenna Center Beam Center

Single monitor arm Antenna table center beam center mount kit



Antenna Center Beam Side Mount Single monitor arm Antenna table center beam side mount kit



Slat Wall Mast Mount



Single monitor arm slat wall 8" mast mount kit

Single monitor arm slat wall 12" mast mount kit Single monitor arm slat wall 16" mast mount kit

## Order Code

## Example: SAP-MA-S-CLMP-K-(115)-(R) SAP-MA- Sapper single standard S-CLMP-K arm table clamp kit 115 Medium Grey Red knob

## **Ordering Information**

Bright White (118)

Silver (SILV)

Silver (613) Knob Finish Option:

Red (R) Black (B)

Silver Monitor Arm Finish Option:

Silver Compact Arm Finish Option:

Specify:	Antenna table center beam si
<ol> <li>Pattern number</li> <li>Finish where required</li> </ol>	mount finish options: Jet Black (111) Brown (112)
Kits do not require any additional mounting specifications.	Dark Grey (113) Folkstone (114)
Standard Monitor Arm Finish	Medium Grey (115) Sandstone (116)
Options: Jet Black (111)	Soft Grey (117) Bright White (118)
Medium Grey (115)	Dark Red (130)

Slate Blue (131) Beige Mist Metallic (611)

Medium Metallic Grey (612) Silver Metallic (613)

finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAAcompliant (Trade Agreements Act). \* Kits without masts do not require

USA made standard single monitor

arm kits are available in a silver

and do not include adjustment knob and cable management clips.

pattern no.	silver finish list price	standard finish list price
SAP MAS DHK()	\$423.	\$368.

SAP MAS ANT CTRK()	337.	294.

345.

378.

SAP MA S SW MST 8 K()	364.	317.
SAP MAS SW MST 12 K()	371.	323.

## **Mounting and Application Information**

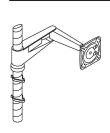
See page 128 for comprehensive mounting, application and construction information.

SAP MAS ANT SIDE K()()

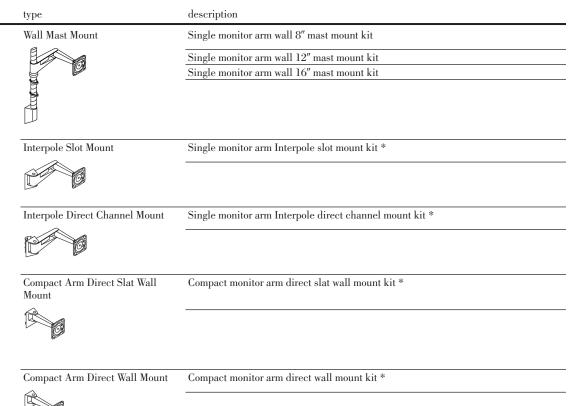
SAP MAS SW MST 16 K()

list price

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Single Arm Kits by Richard Sapper



Kit includes everything needed to mount one monitor to a worksurface, slat wall or wall: single standard arm, 16" mast(unless otherwise specified), movement joint (includes fast release monitor plate), adjustment knob, cable management clips and mounting option (see right for options)



•	1	
SAP MAS WL MST 8 K()	\$358.	\$312.
SAP MAS WL MST 12 K()	364.	317.
SAP MAS WL MST 16 K()	371.	323.
SAP MAS POLE SLOT K()	279.	243.
SAP MAS POLE DCHK()	340.	296.
SAP MA C SW DIR K ( )	255.	199.
SAP MA C WL DIR K ( )	239.	180.

silver finish

list price

### **Order Code**

# Exar SAP S-CI 115 R

## **Ordering Information**

ample: SAP-MA-S-CLMP-K- (115)-(R)	Specify: 1. Pattern number	Antenna table center beam side mount finish options:
AP-MA- Sapper single standard CLMP-K arm table clamp kit	2. Finish where required	Jet Black (111) Brown (112)
5 Medium Grey	<ul> <li>Kits do not require any additional mounting specifications.</li> </ul>	Dark Grey (113) Folkstone (114)
Red knob	— Standard Monitor Arm Finish Options:	Medium Grey (115) Sandstone (116)
	Jet Black (111) Medium Grey (115)	Soft Grey (117) Bright White (118) Dark Red (130)

Bright White (118)

Knob Finish Option:

Silver (SILV)

Red (R) Black (B)

Silver Monitor Arm Finish Option:

Silver Compact Arm Finish Option: Silver (613)

t finish options: ack (111) ı (112) Grey (113) tone (114) um Grey (115) stone (116) Grey (117) t White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

64

USA made standard single monitor arm kits are available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAAcompliant (Trade Agreements Act).

\* Kits without masts do not require and do not include adjustment knob and cable management clips.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

pattern no.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Double Arm Kits by Richard Sapper

Kit includes everything needed to mount two monitors to a worksurface, slat wall or wall: two standard arms, 16" mast (unless otherwise specified), movement joints (includes fast release monitor plate), adjustment knob, cable management clips, double arm bracket and mounting option (see right for options)

description

Two-Piece Table Clamp Mount

Double monitor arm table clamp kit



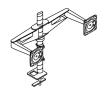
Deep Table Clamp Mount

Double monitor arm deep table clamp kit



Grommet Mount

Double monitor arm grommet mount kit



Fixed Table Mount

Double monitor arm fixed table mount kit



Antenna Center Beam Center

Double monitor arm Antenna table center beam center mount kit



### Order Code

Example:	SAP-MA-D-ANT-SIDE- K-(115)-(613)-(R)
SAP-MA-	Sapper double monitor
D-ANT-	arm Antenna side beam
SIDE-K	mount
115	Medium Grey
613	Silver
R	Red knob

## **Ordering Information**

Specify:	Antenna table center beam side
1. Pattern number	mount finish options:
2. Finish where required	Jet Black (111) Brown (112)
Kits do not require any additional	Dark Grey (113)
mounting specifications.	Folkstone (114)
Standard Monitor Arm Finish	Medium Grey (115) Sandstone (116)
Options:	Soft Grey (117)
Jet Black (111)	Bright White (118)
Medium Grey (115)	Dark Red (130)
Bright White (118)	Slate Blue (131)

Silver Monitor Arm Finish Option: Silver (SILV) Knob Finish Option:

Red (R) Black (B)

ons: Dark Red (130)
Slate Blue (131)
Beige Mist Metallic (611)
Medium Metallic Grey (612)

Silver Metallic (613)

66

USA made double monitor arm kits are available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAA compliant (Trade Agreements Act).

pattern no.	silver finish list price	standard finish list price
SAP MA D CLMP K()	\$618.	\$537.

SAP MA D CLMP DP K ()	657.	571.

SAP MA D GRMT K()	632.	549.
-------------------	------	------

SAP MA D FTM K ( )	606.	527.

SAP MA D ANT CTR K ( )	606.	527.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Double Arm Kits by Richard Sapper

Kit includes everything needed to mount two monitors to a worksurface, slat wall or wall: two standard arms, 16" mast (unless otherwise specified), movement joints (includes fast release monitor plate), adjustment knob, cable management clips, double arm bracket and mounting option (see right for options)

description type

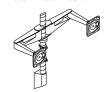
Double monitor arm Antenna table center beam side mount kit



Slat Wall Mast Mount

Double monitor arm slat wall 8" mast mount kit Double monitor arm slat wall 12" mast mount kit Double monitor arm slat wall 16" mast mount kit

Wall Mast Mount



Double monitor arm wall 8" mast mount kit

Double monitor arm wall 12" mast mount kit Double monitor arm wall 16" mast mount kit

## Order Code

Example:	SAP-MA-D-ANT-SIDE- K-(115)-(613)-(R)
SAP-MA-	Sapper double monitor
D-ANT-	arm Antenna side beam
SIDE-K	mount
115	Medium Grey
613	Silver
R	Red knob

## **Ordering Information**

Specify:

1. Pattern number mount	
2. Finish where required Jet Bla	
Brown	ı (11
Kits do not require any additional Dark (	Gre
mounting specifications. Folkst	one
Mediu	m (
Standard Monitor Arm Finish Sandsi	tone
Options: Soft G	rev
Jet Black (111) Bright	Ŵ۱
Medium Grey (115) Dark I	
Bright White (118) Slate I	

68

Silver Monitor Arm Finish Option: Silver (SILV) Knob Finish Option:

Red (R) Black (B)

finish options: ack (111) (12)rey (113) ne (114) Grey (115) one (116) ey (117) hite (118) Dark Red (130)
Slate Blue (131)
Beige Mist Metallic (611)
Medium Metallic Grey (612) Silver Metallic (613)

Antenna table center beam side

USA made double monitor arm kits are available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAA compliant (Trade Agreements Act).

pattern no.	silver finish list price	standard finish list price
SAP MA D ANT SIDE K ( )( )	\$612.	\$532.

SAP MA D SW MST 8 K()	632.	549.
SAP MA D SW MST 12 K()	638.	555.
SAP MA D SW MST 16 K()	644.	561.

SAP MA D WL MST 8 K ( )	624.	542.
SAP MA D WL MST 12 K ( )	632.	549.
SAP MA D WL MST 16 K ( )	638.	555.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

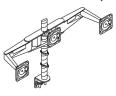
## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Triple Monitor Support Kits by Richard Sapper

Kit includes everything needed to  $mount\ three\ monitors\ to\ a$ worksurface, slat wall or wall: two standard arms, 16" mast (unless otherwise specified), movement  $joints\ (includes\ fast\ release\ monitor$ plate), adjustment knob, cable management clips, triple monitor support bracket and mounting option (see right for options)

description

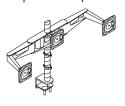
Two-Piece Table Clamp Mount

Triple monitor support two-piece table clamp kit



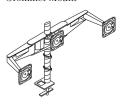
Deep Table Clamp Mount

Triple monitor support deep table clamp kit



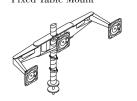
Grommet Mount

Triple monitor support grommet mount kit



Fixed Table Mount

Triple monitor support fixed table mount kit



## Order Code

Example: SAP-MA-3-CLMP-K-(111)-(B)

SAP-MA- Sapper triple monitor 3-CLMP-K support table clamp kit 111 Jet Black Black knob

**Ordering Information** 

Specify: 1. Pattern number 2. Finish where required

Kits do not require any additional mounting specifications. Standard Monitor Arm Finish

Options: Jet Black (111) Medium Grey (115) Bright White (118)

Silver Monitor Arm Finish Option: Silver (SILV)

Knob Finish Option: Red (R) Black (B)

Antenna table center beam side mount finish options: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114)

Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612)

Silver Metallic (613)

## **Ordering Note**

Please note a triple monitor support includes two standard arms plus one triple monitor support bracket with a movement joint. The monitor in the middle can rotate, tilt and swivel but has no depth adjustment. See page 128 for further details.

USA made triple monitor arm kits are available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAA compliant (Trade Agreements Act).

pattern no.	list price	list price
SAP MA 3 CLMP K ( )	\$846.	\$735.

silver finish

SAP MA 3 CLMP DP K()	883.	771.

SAP MA 3 GRMT K ( )	859.	747.

SAP MA 3 FTM K ()	833.	725.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

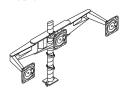
# chnology Managemer

## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Triple Monitor Support Kits by Richard Sapper

Kit includes everything needed to mount three monitors to a worksurface, slat wall or wall: two standard arms, 16" mast (unless otherwise specified), movement joints (includes fast release monitor plate), adjustment knob, cable management clips, triple monitor support bracket and mounting option (see right for options) description

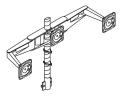
Antenna Center Beam Center

Triple monitor support Antenna table center beam center mount kit



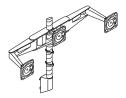
Antenna Center Beam Side Mount

Triple monitor support Antenna table center beam side mount kit



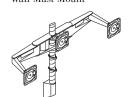
Slat Wall Mast Mount

Triple monitor support slat wall 8" mast mount kit



Triple monitor support slat wall 12" mast mount kit
Triple monitor support slat wall 16" mast mount kit

Wall Mast Mount



Triple monitor support wall 8" mast mount kit

Triple monitor support wall 12" mast mount kit
Triple monitor support wall 16" mast mount kit

## Order Code

Example: SAP-MA-3-CLMP-K(111)-(B)
SAP-MASapper triple monitor

SAP-MA- Sapper triple monitor
3-CLMP-K support table clamp kit
111 Jet Black

B Black knob

**Ordering Information** 

Specify:
1. Pattern number
2. Finish where required

Kits do not require any additional mounting specifications.

Standard Monitor Arm Finish Options: Jet Black (111) Medium Grey (115) Bright White (118) Silver Monitor Arm Finish Option:

Silver (SILV)

Knob Finish Option: Red (R) Black (B)

Antenna table center beam side mount finish options: Jet Black (111) Brown (112) Dark Grey (113)

Folkstone (114)
Medium Grey (115)
Sandstone (116)
Soft Grey (117)
Bright White (118)
Dark Red (130)
Slate Blue (131)
Beige Mist Metallic (611)
Medium Metallic Grey (612)

Silver Metallic (613)

72

## **Ordering Note**

Please note a triple monitor support includes two standard arms plus one triple monitor support bracket with a movement joint. The monitor in the middle can rotate, tilt and swivel but has no depth adjustment. See page 128 for further details.

USA made triple monitor arm kits are available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAA compliant (Trade Agreements Act).

	not price	not price
SAP MA 3 ANT CTR K ( )	\$833.	\$725.

silver finish

SAP MA 3 ANT SIDE K ( )( )	839.	730.

SAP MA 3 SW MST 8 K()	859.	747.
SAP MA 3 SW MST 12 K()	866.	753.
SAP MA 3 SW MST 16 K()	871.	760.

SAP MA 3 WL MST 8 K()	853.	742.
SAP MA 3 WL MST 12 K()	859.	747.
SAP MA 3 WL MST 16 K()	866.	753.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

# nology Management

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Quadruple Mount Support Kits by Richard Sapper

Kit includes everything needed to mount four monitors back-to-back to a center table mount: four standard arms, 16" or 24" mast, movement joints (includes fast release monitor plate), adjustment knob, cable management clips, quadruple monitor support bracket and mounting option (see right for options) type description

Antenna Center Beam Center Quadruple monitor support Antenna table center beam center mount 16" mast kit

Quadruple monitor support Antenna table center beam center mount 24" mast kit

pattern no.	silver finish list price	standard finisl list price
SAP MA 16 4 ANT CTR K ( )	\$1,048.	\$910
SAP MA 24 4 ANT CTR K ( )	1,099.	955

Order Co	de	Ordering Information	Ordering Note
Example:	SAP-MA-16-4-ANT- CTR-K-(111)-(R)	Specify: 1. Pattern number	USA made quadruple monitor arm kits are available in a silver finish
SAP-MA- Sapper quadruple 16-4-ANT- monitor support Antenna CTR-K table center beam center mount 16" mast kit  2. Finish where required  Kits do not require any additional mounting specifications.	for a \$425 upcharge to standard finish by specifying a 613 finish. Kits with a 613 finish (which come with foreign components) are BAA-(Buy American Act) and TAA		
111 R	Jet Black Red knob		compliant (Trade Agreements Act).
		Silver Monitor Arm Finish Option: Silver (SILV)	
		Knob Finish Option: Red (R) Black (B)	

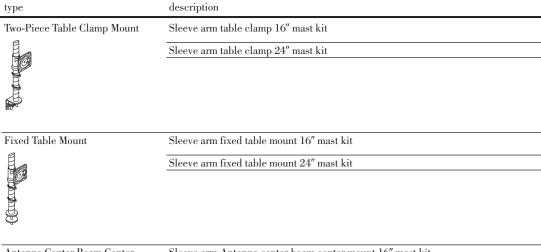
74

## Mounting and Application Information

See page 128 for comprehensive mounting, application and construction information.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper Sleeve Arm Kits by Richard Sapper

Kit includes everything needed to mount one monitor to a worksurface: Sleeve arm, 16" or 24" mast, movement joint, adjustment knob, cable management clips and mounting option (see right for options)



Fixed Table Mount	Sleeve arm fixed table mount 16" mast kit
	Sleeve arm fixed table mount 24" mast kit
9000000	
Antenna Center Beam Center Mount	Sleeve arm Antenna center beam center mount 16" mast kit
	Sleeve arm Antenna center beam center mount 24" mast kit

Order Code	Ordering Information
Oraci ooac	Oracining innormation

Specify:

Knob Finish Option:

Red (R) Black (B)

Example:	SAP-MA-SL-16-CLMP- K-111-R
SAP-MA-	Sapper arm with table
SL-16-	clamp kit on 16" mast
CLMP-K	-
111	Jet Black
R	Red knob

 Pattern number
 Finish where required Kits do not require any additional mounting specifications. Standard Monitor Arm Finish Options: Jet Black (111) Medium Grey (115) Bright White (118) Silver Monitor Arm Finish Option: Silver (613)

Antenna center beam side mount finish options: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

76

\* Kits without masts do not require and do not include adjustment knob and cable management clips.

pattern no.	silver finish list price	standard finish list price
SAP MA SL 16 CLMP K	\$237.	\$205.
SAP MA SL 24 CLMP K	285.	248.
SAP MA SL 16 FTM K	216.	189.
SAP MA SL 24 FTM K	265.	231.
SAP MA SL 16 ANT CTR K	222.	194.
SAP MA SL 24 ANT CTR K	273.	238.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

list price

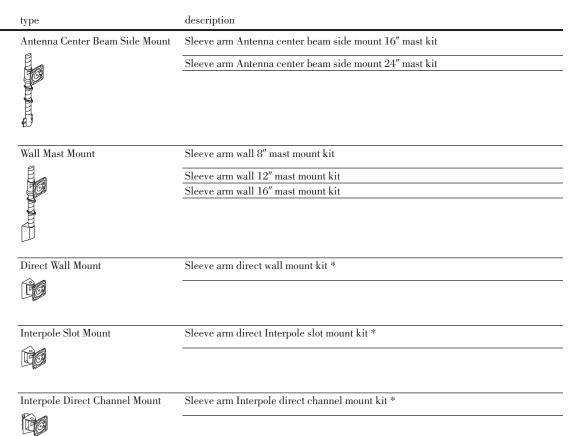
silver finish

list price

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper Sleeve Arm Kits by Richard Sapper



Kit includes everything needed to mount one monitor to a worksurface: Sleeve arm, 16" or 24" mast, movement joint, adjustment knob, cable management clips and mounting option (see right for options)



F	P	P
SAP MA SL 16 ANT SIDE K	\$229.	\$200.
SAP MA SL 24 ANT SIDE K	279.	243.
SAP MA SL WL MST 8 K	237.	205.
SAP MA SL WL MST 12 K	242.	210.
SAP MA SL WL MST 16 K	248.	215.
SAP MA SL WL DIR K	155.	135.
SAP MA SL POLE SLOT K	173.	151.
SAP MA SI POI F DCH K	237	205.
SAP MA SL POLE DCH K	237.	

## Order Code

## Example: SAF K-11 SAP-MA- Sapp SL-16clam CLMP-K 111 Jet E Red

## **Ordering Information**

P-MA-SL-16-CLMP-	Specify:
11-R	1. Pattern number
per arm with table	2. Finish where required
mp kit on 16" mast	Kits do not require any additional mounting specifications.
Black	•
l knob	Standard Monitor Arm Finish Options:
	Jet Black (111)
	M 1: () (115)

Silver (613)

Red (R) Black (B)

Knob Finish Option:

Antenna center beam side mount finish options: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Medium Grey (115) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Silver Monitor Arm Finish Option: Medium Metallic Grey (612)

78

Silver Metallic (613)

\* Kits without masts do not require and do not include adjustment knob and cable management clips.

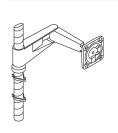
## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

pattern no.

silver finish

# $Sapper^{TM}\ Monitor\ Arm\ Collection$ Easy Order Sapper 50® Single Arm kits by Richard Sapper



 ${\it Kit\ includes\ everything\ needed\ to}$ mount one monitor to a worksurface: single Sapper 50 monitor arm, mast option (if applicable), Sapper 50 movement joint, adjustment knob, cable management clips and mounting option (see right for options).

type	description
Two-Piece Table Clamp Mount	Sapper 50 monitor arm table clamp 16" mast kit
	Sapper 50 monitor arm table clamp 24" mast kit
Deep Table Clamp Mount	Sapper 50 monitor arm deep table clamp 16" mast kit
	Sapper 50 monitor arm deep table clamp 24" mast kit
Grommet Mount	Sapper 50 monitor arm grommet mount 16" mast kit
	Sapper 50 monitor arm grommet mount 24" mast kit
Fixed Table Mount	Sapper 50 monitor arm fixed table mount 16" mast kit
	Sapper 50 monitor arm fixed table mount 24" mast kit
Antenna Center Beam Center Mount	Sapper 50 monitor arm Antenna center beam center mount 16" mast kit
	Sapper 50 monitor arm Antenna center beam center mount 24" mast kit

## Order Code

Example:	SAP-MA-50S-16-CLMP- K-111-R
SAP-MA-	Sapper Monitor Arm
50S-16-	Collection monitor arm
CLMP-K	
111	Jet Black finish
R	Red adjustment knob

## **Ordering Information**

80

\* Kits without masts do not require and do not include adjustment knob and cable management clips.

Sapper 50 is not available in Medium Grey (115).

pattern no.	list price	list price
SAP MA 50S 16 CLMP K	\$561.	\$485.
SAP MA 50S 24 CLMP K	604.	528.
SAP MA 50S 16 CLMP DP K	592.	517.
SAP MA 50S 24 CLMP DP K	641.	561.
SAP MA 50S 16 GRMT K	566.	490.
SAP MA 50S 24 GRMT K	609.	533.
SAP MA 50S 16 FTM K	543.	474.
SAP MA 50S 24 FTM K	586.	517.
SAP MA 50S 16 ANT CTR K	543.	474.
SAP MA 50S 24 ANT CTR K	586.	517.

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper 50® Single Arm kits by Richard Sapper

9/2
Ħ

Kit includes everything needed to mount one monitor to a worksurface: single Sapper 50 monitor arm, mast option (if applicable), Sapper 50 movement joint, adjustment knob, cable management clips and mounting option (see right for options).

type	description
Antenna Center Beam Side Moun	Sapper 50 monitor arm Antenna center beam side mount 16" mast kit
	Sapper 50 monitor arm Antenna center beam side mount 24" mast kit
Wall Mast Mount	Sapper 50 monitor arm wall 8" mast mount kit
	Sapper 50 monitor arm wall 12" mast mount kit
	Sapper 50 monitor arm wall 16" mast mount kit
Direct Wall Mount	Sapper 50 monitor arm direct wall mount kit *
Interpole Slot Mount	Sapper 50 monitor arm Interpole slot mount kit *
Interpole Direct Channel Mount	Sapper 50 monitor arm Interpole direct channel mount kit *

pattern no.	silver finish list price	standard finish list price
SAP MA 50S 16 ANT SIDE K	\$549.	\$479.
SAP MA 50S 24 ANT SIDE K	598.	523.
SAP MA 50S WL MST 8 K	566.	490.
SAP MA 50S WL MST 12 K SAP MA 50S WL MST 16 K	571. 576.	495. 501.
SAP MA 50 WL DIR K	371.	323.
SAP MA 50 WL DIR K SAP MA 50S POLE SLOT K	371. 538.	323. 468.

## Order Code

Example:	SAP-MA-50S-16-CLMP- K-111-R
SAP-MA-	Sapper Monitor Arm
50S-16-	Collection monitor arm
CLMP-K	
111	Jet Black finish
R	Red adjustment knob

## **Ordering Information**

Knob Finish Option:

Red (R) Black (B)

Specify:	Antenna center beam side mount finish options:
<ol> <li>Pattern number</li> <li>Finish where required</li> </ol>	Jet Black (111) Brown (112)
Kits do not require any additional mounting specifications.	Dark Grey (113) Folkstone (114)
Standard Monitor Arm Finish Options:	Medium Grey (115) Sandstone (116)
Jet Black (111) Bright White (118)	Soft Grey (117) Bright White (118) Dark Red (130)
Silver Monitor Arm Finish Option: Silver (613)	Slate Blue (131) Beige Mist Metallic (611)
	Medium Metallic Grey (612)

82

Silver Metallic (613)

\* Kits without masts do not require and do not include adjustment knob and cable management clips.

Sapper 50 is not available in Medium Grey (115).

## **Mounting and Application Information**

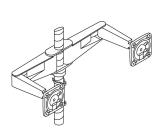
See page 128 for comprehensive mounting, application and construction information.

list price

615.

656.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper 50® Double Arm kits by Richard Sapper



Kit includes everything needed to mount two monitors to a worksurface: two Sapper 50 double monitor arms, Sapper 50 double arm bracket, 16" or 24" mast, two Sapper 50 movement joints, adjustment knob, cable management clips and mounting option (see right for options).

type	description
Two-Piece Table Clamp Mount	Sapper 50 double monitor arm table clamp 16" mast kit
	Sapper 50 double monitor arm table clamp 24" mast kit

Deep Table Clamp Mount

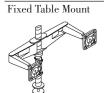
Sapper 50 double monitor arm deep table clamp 16" mast kit

Sapper 50 double monitor arm deep table clamp 24" mast kit

Grommet Mount

Sapper 50 double monitor arm grommet mount 16" mast kit

Sapper 50 double monitor arm grommet mount 24" mast kit



Sapper 50 double monitor arm fixed table mount 16" mast kit

Sapper 50 double monitor arm fixed table mount 24" mast kit

## Order Code

Example:	SAP-MA-50D-16-CLMP- K-111-R
SAP-MA- 50D-16-	Sapper 50 double monitor arm with table
CLMP-K	clamp on 16" mast
111	Jet Black finish
R	Red adjustment knob

## Ordering Information

Silver (613)

Red (R) Black (B)

 $Knob\ Finish\ Option:$ 

Specify:  1. Pattern number 2. Finish where required Kits do not require any additional mounting specifications.  Standard Monitor Arm Finish Options:	Antenna center beam side mount finish options: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117)
Jet Black (111) Bright White (118)	Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131)
Silver Monitor Arm Finish Option:	Daima Mint Matallin (611)

84

See page 128 for comprehensive mounting, application and construction information.

Sapper 50 is not available in Medium Grey (115).

r	P	P
SAP MA 50D 16 CLMP K	\$725.	\$630.
SAP MA 50D 24 CLMP K	772.	671.
SAP MA 50D 16 CLMP DP K	761.	661.
SAP MA 50D 24 CLMP DP K	808.	702.
SAP MA 50D 16 GRMT K	731.	636.
SAP MA 50D 24 GRMT K	778.	677.

85

silver finish

list price

707.

754.

h Option:

Dark White (116)
Dark Red (130)
Slate Blue (131)
Beige Mist Metallic (611)
Medium Metallic Grey (612)
Silver Metallic (613)

pattern no.

SAP MA 50D 16 FTM K

SAP MA 50D 24 FTM K

list price

\$651.

692.

615.

656.

641.

646.

silver finish

list price

\$748.

795.

707.

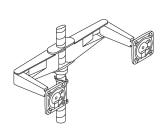
754.

737.

743.

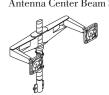
# hnology Managemen

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper $50^{\text{@}}$ Double Arm kits by Richard Sapper



Kit includes everything needed to mount two monitors to a worksurface: two Sapper 50 double monitor arms, Sapper 50 double arm bracket, 16" or 24" mast, two Sapper 50 movement joints, adjustment knob, cable management clips and mounting option (see right for options).

type	description
Antenna Center Beam Center Mount	Sapper 50 double monitor arm Antenna center beam center mount 16" mast kit
	Sapper 50 double monitor arm Antenna center beam center mount 24" mast kit



Antenna Center Beam Side Mount Sapper 50 double monitor arm Antenna center beam side mount 16" mast kit

Sapper 50 double monitor arm Antenna center beam side mount 24" mast kit

Wall Mast Mount



Sapper 50 double monitor arm wall 12" mast mount kit

Sapper 50 double monitor arm wall 16'' mast mount kit

## Order Code

Example:	SAP-MA-50D-16-CLMP- K-111-R
SAP-MA-	Sapper 50 double
50D-16-	monitor arm with table
CLMP-K	clamp on 16" mast
111	Jet Black finish
R	Red adjustment knob

## Ordering Information

Knob Finish Option:

Red (R) Black (B)

Specify:	Antenna center beam side moun finish options:
1. Pattern number	Jet Black (111)
2. Finish where required	Brown (112)
Kits do not require any additional	Dark Grey (113)
mounting specifications.	Folkstone (114)
Standard Monitor Arm Finish	Medium Grey (115) Sandstone (116)
Options:	Soft Grey (117)
Jet Black (111)	Bright White (118)
Bright White (118)	Dark Red (130)
Silver Monitor Arm Finish Option:	Slate Blue (131)
Silver (613)	Beige Mist Metallic (611)
,	Medium Metallic Grey (612)

86

Silver Metallic (613)

See page 128 for comprehensive mounting, application and construction information.

Sapper 50 is not available in Medium Grey (115).

ehensive nd n. le in

87

pattern no.

SAP MA 50D 16 ANT CTR K

SAP MA 50D 24 ANT CTR K

SAP MA 50D 16 ANT SIDE K

SAP MA 50D 24 ANT SIDE K

SAP MA 50D WL MST 12 K

SAP MA 50D WL MST 16 K

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper 50® Sleeve Arm Kits by Richard Sapper



Kit includes everything needed to mount one monitor to a worksurface: Sapper 50 sleeve arm, 16" or 24" mast, Sapper 50 movement joint, adjustment knob, cable management clips and mounting option (see right for options)

type	description
Two-Piece Table Clamp Mount	Sapper 50 sleeve arm table clamp 16" mast kit
	Sapper 50 sleeve arm table clamp 24" mast kit
Fixed Table Mount	Sapper 50 sleeve arm fixed table mount 16" mast kit
	Sapper 50 sleeve arm fixed table mount 24" mast kit
Antenna Center Beam Center Mount	Sapper 50 sleeve arm Antenna center beam center mount 16" mast kit
	Sapper 50 sleeve arm Antenna center beam center mount 24" mast kit

pattern no.	silver finish list price	standard finish list price
SAP MA 50S SL 16 CLMP K	\$360.	\$313.
SAP MA 50S SL 24 CLMP K	409.	356.
SAP MA 50S SL 16 FTM K	340.	296.
SAP MA 50S SL 24 FTM K	390.	338.
SAP MA 50S SL 16 ANT CTR K	347.	301.
SAF WA 303 SE IO ANT CIR K	347.	501.
SAP MA 50S SL 24 ANT CTR K	397.	345.

## Order Code

Example: SAP-MA-50S-SL-16-CLMP-K-111-R SAP-MA- Sapper 50 sleeve arm **50S-SL-** with table clamp kit on **16-CLMP-** 16" mast 111 Jet Black Red knob

## Ordering Information

Silver (613)

Red (R) Black (B)

Knob Finish Option:

Antenna center beam side mount Specify: finish options: Jet Black (111) 1. Pattern number 2. Finish where required Brown (112) Kits do not require any additional mounting specifications. Dark Grey (113) Folkstone (114) Medium Grey (115) Standard Monitor Arm Finish Sandstone (116) Options: Soft Grey (117) Jet Black (111) Bright White (118) Bright White (118) Dark Red (130) Slate Blue (131) Silver Monitor Arm Finish Option:

\* Kits without masts do not require and do not include adjustment knob and cable management clips. Sapper 50 is not available in Medium Grey (115).

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and

construction information.

88

Beige Mist Metallic (611) Medium Metallic Grey (612)

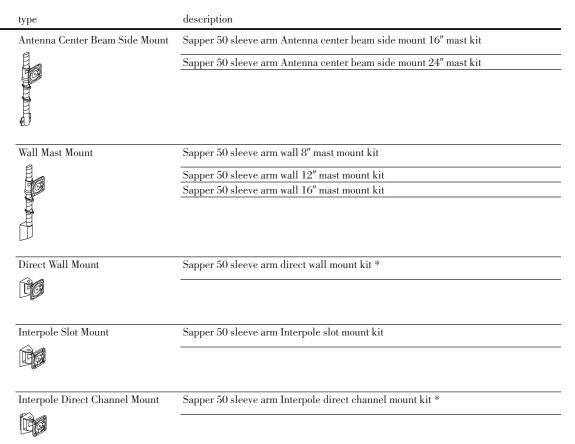
Silver Metallic (613)

silver finish

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Sapper $50^{\$}$ Sleeve Arm Kits by Richard Sapper

A	
ğ	
Ħ	

Kit includes everything needed to mount one monitor to a worksurface: Sapper 50 sleeve arm, 16" or 24" mast, Sapper 50 movement joint, adjustment knob, cable management clips and mounting option (see right for options)



pattern no.	list price	list price
SAP MA 50S SL 16 ANT SIDE K	\$354.	\$308
SAP MA 50S SL 24 ANT SIDE K	403.	351.
SAP MA 50S SL WL MST 8 K	360.	313
SAP MA 50S SL WL MST 12 K	365.	318.
SAP MA 50S SL WL MST 16 K	371.	323.
SAP MA 50S SL WL DIR K	340.	296.
SAP MA 50S SL POLE SLOT K	340.	296.
SAP MA 50S SL POLE DCH K	403.	351.

### Order Code

Example: SAP-MA-50S-SL-16-CLMP-K-111-R

SAP-MA- Sapper 50 sleeve arm with table clamp kit on 16-CLMP- 16" mast K

111 Jet Black

R Red knob

## Ordering Information

Specify: finish options: 1. Pattern number Jet Black (111) 2. Finish where required Brown (112) Kits do not require any additional Dark Grey (113) Folkstone (114) mounting specifications. Medium Grey (115) Standard Monitor Arm Finish Sandstone (116) Options: Soft Grey (117) Jet Black (111) Bright White (118) Bright White (118) Dark Red (130)

Silver Monitor Arm Finish Option: Silver (613)

Knob Finish Option: Red (R) Black (B) Antenna center beam side mount
finish options:

Jet Black (111)
Brown (112)

Brown (12)

Sapper 50 is not available in

Slate Blue (131)

90

Beige Mist Metallic (611)

Medium Metallic Grey (612) Silver Metallic (613) Sapper 50 is not available in Medium Grey (115).

## Mounting and Application Information

See page 128 for comprehensive mounting, application and construction information.

1,149.

1,407.

1,240.

1,499.

## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Beam Kits for 3 Monitors with Table Clamps by Richard Sapper

Kit includes everything needed to mount one beam to a worksurface table: two masts, 2 heavy duty table clamps, 3 movement joint slides, 2 beam-to-mast mounts, 2 adjustment knobs, beam cable management clips, mast cable management clips and beam option (see right for options)

description

Small beam kit with heavy duty table clamp mounts

50" beam kit with 16" mast and 3 movement joint slides

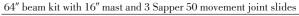
50" beam kit with 16" mast and 3 Sapper 50 movement joint slides

50" beam kit with 24" mast and 3 movement joint slides

50" beam kit with 24" mast and 3 Sapper 50 movement joint slides

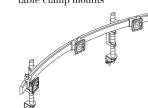
table clamp mounts

64" beam kit with 16" mast and 3 movement joint slides



64" beam kit with 24" mast and 3 movement joint slides

64" beam kit with 24" mast and 3 Sapper 50 movement joint slides



SAP 50 B 16 S 3 CLMP HD K SAP B 24 S 3 CLMP HD K	SAPB16S3CLMPHDK	\$1,094
	CAR FOR A C.C.A. CLARRIUR IV	1.959
SAPB24S3CLMPHDK		1,353
	SAPB24S3CLMPHDK	1,185
SAP 50 B 24 S 3 CLMP HD K	SAP 50 B 24 S 3 CLMP HD K	1,443
		,

Order Code	Ordering Information	_	Mounting and Application

Example: SAP-B-16-S-3-CLMP-HD-K-(R) SAP-B-16- Sapper small beam kit on 16" mast with 3 **CLMP-HD-** movement joint slides and heavy duty clamp Red knob

Specify:

1. Pattern number

2. Knob finish option

Kits do not require any additional mounting specifications.

Knob Finish Option: Red (R) Black (B)

See page 128 for comprehensive mounting and application information.

SAP B 16 M 3 CLMP HD K

SAP 50 B 16 M 3 CLMP HD K

SAP 50 B 24 M 3 CLMP HD K

SAP B 24 M 3 CLMP HD K

ation Information

92

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Beam Kits for 3 Monitors with Antenna Mounts by Richard Sapper

## description

Small beam kit with Antenna center 50" beam kit with 16" mast and 3 movement joint slides



50" beam kit with 16" mast and 3 Sapper 50 movement joint slides

50" beam kit with 24" mast and 3 movement joint slides

50" beam kit with 24" mast and 3 Sapper 50 movement joint slides

Medium beam kit with Antenna center beam side mounts

64" beam kit with 16" mast and 3 movement joint slides



64" beam kit with 16" mast and 3 Sapper 50 movement joint slides 64" beam kit with 24" mast and 3 movement joint slides

64" beam kit with 24" mast and 3 Sapper 50 movement joint slides

\$1,027
1,285
1,116
1,375

SAP B 16 M 3 ANT SIDE K	1,081.
SAP 50 B 16 M 3 ANT SIDE K	1,340.
SAP B 24 M 3 ANT SIDE K	1,172.
SAP 50 B 24 M 3 ANT SIDE K	1,430.

## Order Code

# Exam SAP-S-3-A SIDE-

Kit includes everything needed to mount one beam to an Antenna

workstation: two masts, 2 Antenna

knobs, beam cable management

and beam option (see right for

center beam side mounts, 3

movement joint slides, 2

options)

## Ordering Information

ei Co	ue	Ordering information	
· P-B-16	SAP-B-16-S-3-ANT-SIDE-K-(118)-(R) - Sapper small beam kit on 16" mast with 3 movement joint slides and Antenna center beam side mount Bright White Red knob	Specify:  1. Pattern number 2. Finish where required  Kits do not require any additional mounting specifications.  Knob Finish Option:  Red (R)  Black (B)	Antenna table center beam side mount finish option: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

## Mounting and Application Information

See page 128 for comprehensive mounting and application

\$1,150.

1,550.

1,297.

1,641.

## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Beam Kits for 4 Monitors with Table Clamps by Richard Sapper

Kit includes everything needed to mount one beam to a worksurface table: two masts, 2 heavy duty table clamps, 4 movement joint slides, 2 beam-to-mast mounts, 2 adjustment knobs, beam cable management clips, mast cable management clips and beam option (see right for options)

description

Small beam kit with heavy duty table clamp mounts

50" beam kit with 16" mast and 4 movement joint slides

50" beam kit with 16" mast and 4 Sapper 50 movement joint slides

50" beam kit with 24" mast and 4 movement joint slides

50" beam kit with 24" mast and 4 Sapper 50 movement joint slides

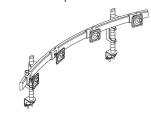
table clamp mounts

64" beam kit with 16" mast and 4 movement joint slides

64" beam kit with 16" mast and 4 Sapper 50 movement joint slides

64" beam kit with 24" mast and 4 movement joint slides

64" beam kit with 24" mast and 4 Sapper 50 movement joint slides



SAP B 16 M 4 CLMP HD K	1,205
SAP 50 B 24 S 4 CLMP HD K	1,58
SAP B 24 S 4 CLMP HD K	1,24
SAP 50 B 16 S 4 CLMP HD K	1,49

## Order Code

Example: SAP-B-16-S-4-CLMP-HD-K-(R) SAP-B-16- Sapper small beam kit

on 16" mast with 4 **CLMP-HD-** movement joint slides and heavy duty clamp Red knob

## **Ordering Information**

1. Pattern number

2. Knob finish option

Kits do not require any additional mounting specifications.

Knob Finish Option: Red (R) Black (B)

Mounting and Application Information

See page 128 for comprehensive mounting and application information.

SAPB16S4CLMPHDK

SAP 50 B 16 M 4 CLMP HD K

SAP 50 B 24 M 4 CLMP HD K

SAP B 24 M 4 CLMP HD K

\$1,083.

1,139.

1,482.

1,227.

1,572.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Beam Kits for 4 Monitors with Antenna Mounts by Richard Sapper

description

Small beam kit with Antenna center 50" beam kit with 16" mast and 4 movement joint slides

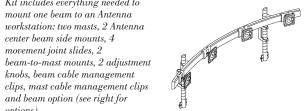


50" beam kit with 16" mast and 4 Sapper 50 movement joint slides 50" beam kit with 24" mast and 4 movement joint slides

50" beam kit with 24" mast and 4 Sapper 50 movement joint slides

Medium beam kit with Antenna center beam side mounts Kit includes everything needed to

64" beam kit with 16" mast and 4 movement joint slides



64" beam kit with 16" mast and 4 Sapper 50 movement joint slides 64" beam kit with 24" mast and 4 movement joint slides 64" beam kit with 24" mast and 4 Sapper 50 movement joint slides

SAP 50 B 16 S 4 ANT SIDE K	1,428
SAP B 24 S 4 ANT SIDE K	1,173
SAP 50 B 24 S 4 ANT SIDE K	1,51
ON JUD 27 O TAIN OIDE N	1,

mount one beam to an Antenna

knobs, beam cable management

and beam option (see right for

center beam side mounts, 4

movement joint slides, 2

options)

## Ordering Information

Order Cod	ie	Ordering information	
SAP-B-16	SAP-B-16-S-4-ANT-SIDE-K-(118)-(R) - Sapper small beam kit on 16" mast with 4 movement joint slides and Antenna center beam side mount Bright White Red knob	Specify: 1. Pattern number 2. Finish where required Kits do not require any additional mounting specifications.  Knob Finish Option: Red (R) Black (B)	Antenna table center beam side mount finish option: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

## **Mounting and Application Information**

See page 128 for comprehensive mounting and application

SAP B 16 S 4 ANT SIDE K

SAP B 16 M 4 ANT SIDE K

SAP B 24 M 4 ANT SIDE K

SAP 50 B 16 M 4 ANT SIDE K

SAP 50 B 24 M 4 ANT SIDE K

# hnology Managemen

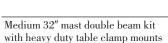
# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Double Beam Kits for 6 Monitors with Table Clamps by Richard Sapper

Kit includes everything needed to mount two beams to a worksurface table: two 32" masts, 2 heavy duty table clamps, 6 movement joint slides, 4 beam-to-mast mounts, 4 adjustment knobs, beam cable management clips, mast cable management clips and two beam options (see right for options) description

Small 32" mast double beam kit with heavy duty table clamp mounts  $50^{\prime\prime}$  double beam kit

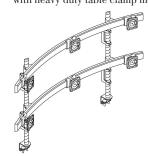
50'' double beam kit with 32'' mast and 6 movement joint slides

50" double beam kit with 32" mast and 6 Sapper 50 movement joint slides



Medium 32" mast double beam kit 64" double beam kit with 32" mast and 6 movement joint slides

64" double beam kit with 32" mast and 6 Sapper 50 movement joint slides



pattern no.	list price
SAP B 32 S 6 CLMP HD K	\$1,780.
SAP 50 B 32 S 6 CLMP HD K	2,297.

SAP B 32 M 6 CLMP HD K	1,834
SAP 50 B 32 M 6 CLMP HD K	2.350

## Order Code

# Example: SAP-B-32-S-6-CLMP-HD-K-(R) SAP-B-32- Sapper 2 small beams S-6- kit on 32" mast with 6 CLMP-HD- movement joint slides K and heavy duty clamp R Red knob

## **Ordering Information**

Specify:
1. Pattern number
2. Knob finish option

Kits do not require any additional mounting specifications.

Knob Finish Option:
Red (R)
Black (B)

## Mounting and Application Information

See page 128 for comprehensive mounting and application information.

\$1,713.

# Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Double Beam Kits for 6 Monitors with Antenna Mounts by Richard Sapper

Kit includes everything needed to mount two beams to an Antenna workstation: two 32" masts, 2 Antenna center beam side mounts, 6 movement joint slides, 4 beam-to-mast mounts, 4 adjustment knobs, beam cable management clips, mast cable management clips and two beam options (see right for options)

description

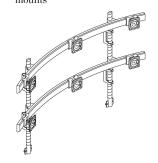
Small 32" mast double beam kit with Antenna center beam side

50" double beam kit with 32" mast and 6 movement joint slides

50" double beam kit with 32" mast and 6 Sapper 50 movement joint slides

Medium 32" mast double beam kit 64" double beam kit with 32" mast and 6 movement joint slides with Antenna center beam side mounts

64" double beam kit with 32" mast and 6 Sapper 50 movement joint slides



# SAP 50 B 32 S 6 ANT SIDE K 2,229. SAP B 32 M 6 ANT SIDE K 1,766. SAP 50 B 32 M 6 ANT SIDE K 2,284.

## Order Code

## Example: SAF **SAP-B-32-** Sap S-6-ANT- kit SIDE-K mov 118 Brig

	Ordering Information	
AP-B-32-S-6-ANT-IDE-K-(118)-(R) apper 2 small beams t on 32" mast with 6 ovement joint slides and Antenna center eam side mount right White ed knob	Specify:  1. Pattern number 2. Finish where required  Kits do not require any additional mounting specifications.  Knob Finish Option: Red (R) Black (B)	Antenna table center beam side mount finish option: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

102

## Mounting and Application Information

See page 128 for comprehensive mounting and application

SAP B 32 S 6 ANT SIDE K

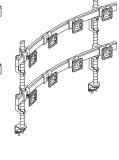
## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Double Beam Kits for 8 Monitors with Table Clamps by Richard Sapper

Kit includes everything needed to mount two beams to a worksurface table: two 32" masts, 2 heavy duty  $table\ clamps, 8\ movement\ joint$  $slides,\,4\;beam\mbox{-}to\mbox{-}mast\;mounts,\,4$ adjustment knobs, beam cable management clips, mast cable management clips and two beam options (see right for options)

Small 32" mast double beam kit with heavy duty table clamp mounts

50" double beam kit with 32" mast and 8 movement joint slides

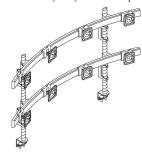
50" double beam kit with 32" mast and 8 Sapper 50 movement joint slides



with heavy duty table clamp mounts

Medium 32" mast double beam kit 64" double beam kit with 32" mast and 8 movement joint slides

64" double beam kit with 32" mast and 8 Sapper 50 movement joint slides



pattern no.	list price
SAP B 32 S 8 CLMP HD K	\$1,893
SAP 50 B 32 S 8 CLMP HD K	2,583

SAP B 32 M 8 CLMP HD K	1,946.
SAP 50 B 32 M 8 CLMP HD K	2.635.

## Order Code

## Example: SAP-B-32-S-8-CLMP-HD-K-(R) SAP-B-32- Sapper 2 small beams

kit on 32" mast with 8 **CLMP-HD-** movement joint slides and heavy duty clamp Red knob

## **Ordering Information**

Black (B)

1. Pattern number 2. Knob finish option

Kits do not require any additional mounting specifications.

104

Knob Finish Option: Red (R)

**Mounting and Application Information** 

See page 128 for comprehensive mounting and application information.

\$1,826.

2,569.

## Sapper<sup>TM</sup> Monitor Arm Collection Easy Order Double Beam Kits for 8 Monitors with Antenna Mounts by Richard Sapper

Kit includes everything needed to mount two beams to an Antenna workstation: two 32" masts, 2 Antenna center beam side mounts, 8 movement joint slides, 4 beam-to-mast mounts, 4 adjustment knobs, beam cable management clips, mast cable management clips and two beam options (see right for options)

description

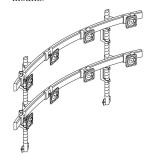
Small 32" mast double beam kit with Antenna center beam side

50" double beam kit with 32" mast and 8 movement joint slides

50" double beam kit with 32" mast and 8 Sapper 50 movement joint slides

Medium 32" mast double beam kit 64" double beam kit with 32" mast and 8 movement joint slides with Antenna center beam side

64" double beam kit with 32" mast and 8 Sapper 50 movement joint slides



SAP 50 B 32 S 8 ANT SIDE K 2,514. SAP B 32 M 8 ANT SIDE K 1,879.

### Order Code

## Example: SAP-B-32-S-8-ANT-SIDE-K(118)-(R) SAP-B-32- Sapper 2 small beams **S-8-ANT-** kit on 32" mast with 8 SIDE-K movement joint slides and Antenna center beam side mount Bright White Red knob

	Ordering Information	
- - -	Specify:  1. Pattern number 2. Finish where required  Kits do not require any additional mounting specifications.  Knob Finish Option: Red (R) Black (B)	Antenna table center beam side mount finish option: Jet Black (111) Brown (112) Dark Grey (113) Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

## **Mounting and Application Information**

See page 128 for comprehensive mounting and application

SAP B 32 S 8 ANT SIDE K

SAP 50 B 32 M 8 ANT SIDE K

# Sapper<sup>TM</sup> Monitor Arm Collection Monitor Arms and Brackets by Richard Sapper

description

Arms and brackets can be ordered individually for easy reconfiguration

Sleeve mount arm (arm with movement joint)



Single compact arm (with movement joint)



Single standard arm (with movement joint)



Double arm bracket (does not include arms, must order separately)



Triple support bracket (does not include arms, must order separately)



Quadruple monitor arm bracket (does not include arms, must order separately)



Order Code Ordering Information

Example: **SAP-MA-S-115** 

SAP-MA-S Sapper single standard monitor arm Medium Grey

Specify: 1. Pattern number

2. Finish where required

Kits do not require any additional mounting specifications.

Standard Monitor Arm Finish Options: Jet Black (111) Medium Grey (115) Bright White (118)

Silver Standard Monitor Arm Finish Option: Silver (SILV)

Silver Finish Option: Silver (613)

USA made standard monitor arm is available in a silver finish for a \$113 upcharge to standard finish by specifying a 613 finish. The standard arm with a 613 finish is BAA-(Buy American Act) and TAA-compliant (Trade Agreements Act).

pattern no.	silver finish list price	standard finish list price
SAP MA SL ()	\$66.	\$57
SAP MA C	200.	142
SAP MAS()	196.	170
SAP D BKT		85
SAP 3 BKT		275
SAP 4 BKT		170

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

# hnology Manageme

# Sapper<sup>TM</sup> Monitor Arm Collection Monitor Arms and Brackets by Richard Sapper

description

Arms and brackets can be ordered individually for easy

reconfiguration

Single Sapper 50 sleeve arm (with movement joint)



Single Sapper 50 arm (with movement joint)



Sapper 50 double arm bracket (does not include arms, must order separately)



pattern no.	silver finish list price	standard finish list price
SAP MA 50S SL	\$187.	\$162.
SAP MA 50S	415.	361.
SAP 50D BKT		134.

## Order Code

Example: SAP-MA-S-115
SAP-MA-S Sapper single

standard monitor arm

115 Medium Grey

Ordering Information

Specify:
1. Pattern number

2. Finish where required

Kits do not require any additional mounting specifications.

Standard Monitor Arm Finish Options: Jet Black (111)

Bright White (118)

Silver Standard Monitor Arm Finish
Option:

Option: Silver (SILV)

Silver Finish Option: Silver (613) USA made standard monitor arm is available in a silver finish for a \$113 upcharge to the standard finish by specifying a 613 finish. The standard arm with a 613 finish is BAA-(Buy American Act) and TAA- compliant (Trade Agreements Act)

Sapper 50 is not available in Medium Grey (115).

See page 128 for comprehensive mounting, application and

# Sapper<sup>TM</sup> Monitor Arm Collection Movement Joints and VESA Plate Adaptors by Richard Sapper

description

Movement joint (includes fast release pin)



 $Beam\ movement\ joint\ slides\ can\ be$ ordered individually for easy reconfiguration



Beam movement joint slide (includes movement joint with fast release pin)



Sapper 50 movement joint (includes fast release pin)



Sapper 50 beam movement joint slide (includes movement joint with fast release pin)



100 X 200 VESA plate adaptor (does not include movement joint)



200 X 200 VESA plate adaptor (does not include movement joint)



Order Code

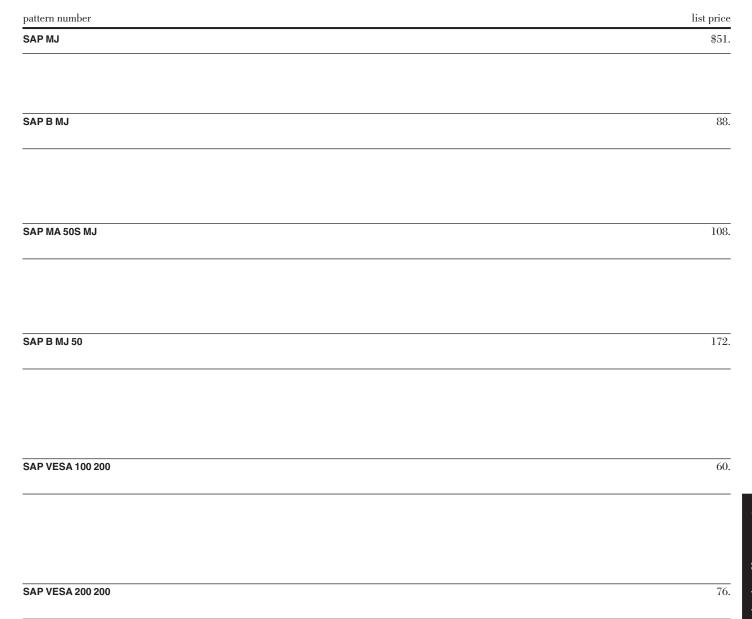
**Ordering Information** 

Example: SAP-MJ

SAP-MJ Sapper movement joint

Specify: 1. Pattern number

USA made standard monitor arm is available in a silver finish for a \$113 upcharge to the standard finish by specifying a 613 finish. The standard arm with a 613 finish is BAA-(Buy American Act) and TAA- compliant (Trade Agreements Act).



## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

# chnology Managemer

# Sapper<sup>TM</sup> Monitor Arm Collection Movement Joints and VESA Plate Adaptors by Richard Sapper

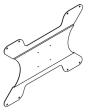
description

300 X 300 VESA plate adaptor (does not include movement joint)



Beam movement joint slides can be ordered individually for easy reconfiguration

400 X 400 VESA plate adaptor (does not include movement joint)



 pattern number
 list price

 SAP VESA 300 300
 \$92.

SAP VESA 400 400

108.

Mounting and Application Information

USA made standard monitor arm is available in a silver finish for a \$113 upcharge to the standard finish by specifying a 613 finish.
The standard arm with a 613 finish in PAA (Rev. Approximately 1914).

is BAA-(Buy American Act) and TAA- compliant (Trade Agreements

Act).

See page 128 for comprehensive mounting, application and construction information.

Order Code Ordering Information

Example: SAP-MJ

SAP-MJ Sapper movement joint

Specify:

1. Pattern number

114

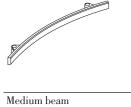
list price

\$494.

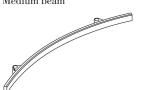
# Sapper<sup>TM</sup> Monitor Arm Collection Beamsby Richard Sapper

Beam comes with mast-to-beam brackets and beam cable management clips. Order mounting option, mast option and movement joint slides separately for full mounting solution.

Small beam 50" beam (includes mast-to-beam bracket and 6 beam cable management clips)



64" beam (includes mast-to-beam bracket and 8 beam cable management clips)



SAP B M 549.

**Mounting and Application Information** 

See page 128 for comprehensive mounting and application information.

pattern no.

SAPBS

list price

\$79.

85.

91.

136.

204.

# echnology Management

# Sapper $^{\text{TM}}$ Monitor Arm Collection Masts by Richard Sapper

description pattern no. 8" Mast (includes adjustment knob and 1 cable management clip) SAP MST 8 12" Mast (includes adjustment knob and 2 cable management clips) SAP MST 12 Masts come in various sizes to accommodate different monitor mounting solutions 16" Mast (includes adjustment knob and 2 cable management clips) SAP MST 16 24" Mast (includes adjustment knob and 2 cable management clips) SAP MST 24 32" Mast (includes 2 adjustment knobs and 4 cable management clips) SAP MST 32

Order Code

Example: SAP-MST-12
SAP-MST- Sapper 12" mast
12

Mounting and Application Information

See page 128 for comprehensive mounting, application and construction information.

# $Sapper^{TM}\ Monitor\ Arm\ Collection$ Adjustment Knobs and Mast Cable Management Clips by Richard Sapper

	description
	Adjustment knob
justment knobs and cable	Mast cable management clips (set of 10)
nagement clips can be ordered lividually	
	Beam cable management clips
	(set of 10)
	Beam mast cable management clips
	(set of 2)
	US CONTRACTOR OF THE CONTRACTO

pattern no.	list price
SAP MST KNB ()	\$15.
SAP MST CM	23.
SAP B CM	22.
SAP B MST CM	34.

## Order Code

Example: SAP-MST-KN-(B) SAP-MST- Sapper adjustment knob KNB

Black knob

Ordering Information

Specify:

Pattern number
 Finish where required

Knob Finish Option: Red (R) Black (B)

Mounting and Application Information

See page 128 for comprehensive mounting and application information.

list price

\$63.

# Sapper<sup>TM</sup> Monitor Arm Collection Mounting Options by Richard Sapper

description



 ${\it Wide selection of interchangeable}$ mounting options provide ultimate flexibility

Two-piece Table C	Clamp Mount
$\triangle$	

Deep Table Clamp Mount



Heavy Duty Clamp Mount



Grommet Mount



Fixed Table Mount



Antenna Table Center Beam Center Mount



Antenna Table Center Beam Side Mount



Slat Wall Mast Mount



Direct Slat Wall Mount



## Order Code

## Ordering Information

Example:	
SAP-	
CLMP	

SAP-CLMP Sapper table clamp Specify: 1. Pattern number 2. Finish where required

Antenna table center beam side mount finish options: Jet Black (111) Brown (112)
Dark Grey (113)
Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131) Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

pattern no.

SAP CLMP

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

SAP CLMP DP 97. SAP CLMP HD 91. SAP GRMT 66. SAP FTM 45. SAP ANT CTR SAP ANT SIDE () 57. SAP SW MST 79. SAP SW DIR 85.

# Sapper<sup>TM</sup> Monitor Arm Collection Mounting Options by Richard Sapper

	description
	Wall Mast Mount
<b>f</b>	
\$	
le selection of interchangeable	Direct Wall mount
unting options provide ultimate ibility	
	Interpole Slot Mount
	Limit Direct Class IM
	Interpole Direct Channel Mount
	Interpole Channel Mast Mount
	Interpole Slot Mast Mount
	Compact Arm Direct Slat Wall Mount
	Compact Arm Direct Wall Mount

pattern no.	list price
SAP WL MST	\$74
SAP WL DIR	79
SAP POLE SLOT	108
SAP POLE DCH	162
SAP POLE CH MST	162
SAP POLE SLOT MST	108
SAP SW DIR C	79
SAP WL DIR C	75

## Order Code

CLMP

### Example: SAP-CLMP SAP-Sapper table clamp

**Ordering Information** 

Specify: 1. Pattern number 2. Finish where required

124

Antenna table center beam side mount finish options:
Jet Black (111)
Brown (112)
Dark Grey (113)
Folkstone (114)
Medium Grey (115)
Sandstone (116)
Soft Grey (117)
Bright White (118)
Dark Red (130)
Slate Blue (131)
Beige Mist Metallic (611)
Medium Metallic Grey (612)
Silver Metallic (613)

## Mounting and Application Information

See page 128 for comprehensive mounting, application and construction information.

list price

# Sapper<sup>TM</sup> Monitor Arm Collection Mounting Options by Richard Sapper

description

Sapper 50 Direct Wall Mount



 ${\it Wide selection of interchangeable}$ mounting options provide ultimate flexibility

Sapper 50 Interpole Slot Mount



Sapper 50 Interpole Direct Channel Mount



## Ordering Information Order Code

Example: SAP-CLMP SAP-CLMP

Sapper table clamp

Specify: 1. Pattern number 2. Finish where required

mount finish options: Jet Black (111) Brown (112)
Dark Grey (113)
Folkstone (114) Medium Grey (115) Sandstone (116) Soft Grey (117) Bright White (118) Dark Red (130) Slate Blue (131)

Antenna table center beam side

Beige Mist Metallic (611) Medium Metallic Grey (612) Silver Metallic (613)

126

SAP 50 WL DIR \$135. SAP POLE50 SLOT 162. SAP POLE50 DCH 215.

127

## **Mounting and Application Information**

See page 128 for comprehensive mounting, application and construction information.

pattern no.

# Sapper<sup>TM</sup> Monitor Arm Collection Mounting, Construction and Application Information

### Mounting and Application Information:

All Sapper standard monitor arms:

- Maximum weight of 20 lbs \* per arm, weight limits vary by mounting option
- Ship standard with fast release movement joint
  Offer 165 degrees of monitor tilt up and down, 180 degrees of swivel left and right and 360 degrees of rotation for portrait and landscape
- Fold into themselves to be highly compact at (only 27/8" when fully compressed)
- Are durable and lightweight (standard arm weighs only 2.6 pounds)

All Sapper 50 monitor arms:

viewing

- Maximum weight of 50 lbs. per arm for single arm and 30 lbs. per arm for double, weight limits vary by mounting option
- Ship standard with fast release movement joint
- Offer 117 degrees of monitor tilt up and down, 180 degrees of swivel left and right and 360 degrees of rotation for portrait or landscape viewing
- Fold into themselves to be highly compact (only 4.75" when fully compressed)

\*Please note this limit accommodates up to 95% of monitors on the market. There is not a specific monitor size maximum limitation for a single Sapper monitor arm. A larger size (e.g., 24" widescreen) does not necessarily equate to a higher weight monitor. It is key to understand the application to know if a certain size monitor will fit within a space and/or if there are multiple monitors. Also, it is important to note weight limitations vary by application. See details below.

## Weight Limits:

Weight limitations for individual mounting options are outlined below. Taken together (both the mounting option weight limit and the individual arm limit) you can determine the best mounting approach for your client given the number of monitors they desire to mount and the weight of those monitors. Weight limits are outlined by mounting option on the next few pages.

For example, if you want to mount two monitors on a worksurface with a grommet mount and each of those monitors weighs 18 lbs (2 monitors x 18 lbs each equals 36 lbs total), we can accommodate that with the 45 lbs weight limit for the 24" mast on a grommet mount and the 20 lbs limitation for each arm. However, we cannot accommodate three monitors weighing 18 lbs each (3 monitors x 18 lbs each equals 54 lbs total) with a 24" mast on a grommet mount, because the maximum weight limitation on a single mast is 45 lbs for this mount.

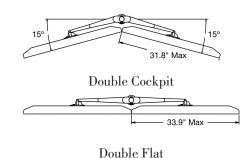
## Size Limits:

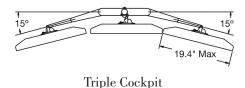
Monitor Arms

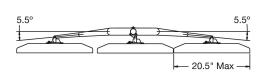
There is no specific maximum size for a single arm solution (outside the limitations of the space in which you are trying to put it). When mounting two monitors, the maximum outer horizontal width per monitor is 31.8" for a cockpit solution or 33.9" for a flat positioning flush next to each

other. For three monitors, the maximum outer horizontal width per monitor is 19.4" for a cockpit solution or 20.5" for a flat positioning flush next to each other in a row. Clients can accommodate larger screen monitors in triples by turning monitor screens to a portrait position.

# Sapper multiple monitor Standard Arm Configurations:







Triple Flat

20.4°

Maximum Monitor Height on a 32" Mast for Double Stacked Monitors

Please note while four monitors (two-on-two) are shown above, the height limitation apply to six monitor (three-on-three) configurations as well.

KEY NOTE: Flat panel monitor manufacturers refer to their products by diagonal screen measurements. So a 19" widescreen monitor has a 19" screen measured diagonally, but is not necessarily 19" in horizontal width (refer to manufacturers specifications for specific overall height and width).

## Beams

For beam solutions, the length of the desktop or Antenna center beam must be at least the width between the outside of the two mounts. For the heavy duty mount, this distance is 39.92" for the small beam and 44.02" for the medium beam. For the Antenna center beam side mount, this distance is 43.17" for the small beam and 47.27" for the medium beam. The length of the workspace in both scenarios must be at least the length of the beam. If monitors extend beyond the end of the beam, additional workspace is required. For additional size guidelines and limitations, please see the Easy Order Beam Kit Guide.



## **Monitor Mounting:**

Our Sapper monitor arms are compatible with the international Video Electronics Standard Association (VESA) industry interface standard and a monitor must be compliant with this standard to be mounted. The standard movement joint (20 lbs maximum) has the VESA standard 75 mm x 75 mm (2.95" x 2.95") and 100 mm x 100 mm (3.94" x 3.94") hole patterns; the Sapper 50 movement joint (50 lbs maximum) has the VESA standard 100 mm x 100 mm (3.94" x 3.94") hole pattern. If your customer has a recessed monitor back with only 75 mm x 75 mm holes, additional spaces will be needed to ensure proper fit. Contact Customer Service for more details including part and pricing information.

A VESA plate adaptor may be necessary for larger monitors and televisions and can be ordered separately in the sizes of 100 mm x 200mm (M5 screws), 200mm x 200mm (M6 screws), 300mm x 300mm (M8 screws) and 400mm x 400mm/400mm x 600mm (M8 screws). Adaptors ship with separate installation instructions and may require spacers. Knoll VESA plate adaptors ship with screws to attach the adaptor to the Knoll VESA plate but do not ship with screws to attach the adaptor to the monitor or television (see screw sizes listed above, English size equivalents may be needed instead); screw length is dependent on the specific monitor or television and screw should be tested prior to installation to ensure correct length. Knoll is not responsible for use of incorrect screws

Knoll and its dealers will not take the responsibility for mounting the monitor to the arm. The end user's IT department must confirm VESA mounting compliance and mount the monitor to the arm using customer's own screws. The most common screws are M5 x 8mm and M5 x 10mm.

Please follow installation instructions closely (available in each kit box shipped as well as on Knoll Exchange).

### **Apple Computer Note:**

VESA Adapters are required for Thunderbolt Displays and iMacs, available from apple.com. Contact Apple directly for VESA Adaptor options on specific iMac models as some may need to be purchased with integrated VESA Mount Adapters. With these adapters, the displays will mount to the 100mm x 100mm hole pattern. iMac 21.5" can be mounted on Sapper and Sapper XYZ. All other Apple displays must be mounted on Sapper 50 due to weight specifications.

### Clamp Mounting:

Two-Piece Table Clamp Mounting:

The standard two-piece table clamp is easy to install or retrofit and works on most worksurfaces or desks that are a minimum of 1½" thick solid core. The maximum worksurface thickness is 2¾". There are four settings to accommodate a range of worksurface thicknesses. For the fourth setting to accommodate the thickest worksurfaces you must invert the lower mounting plate to allow the mount to clamp the maximum 2¾". It is important to mock up the table clamp, particularly on competitive product to ensure a proper fit. The clamp is not compatible with Morrison Network.

Deep Table Clamp Mounting:

This clamp is one piece and works on most surfaces. The deep table clamp mount is intended to clear most knife-edge (45 degree angle) desks or worksurfaces.

Heavy-Duty Table Clamp Mounting:

This clamp is intended for heavier weight applications. Please note that individual monitor arm weight limitations still apply.

## **Grommet Mounting:**

With all systems furniture, it is important to pass monitor and peripheral plugs through grommet mount cover while it is still loose. Please note the grommet mount is compatible with Morrison, Autostrada, Reff, Propeller, Scope and Wa, but is not compatible with the Graham Collection or Dividends Horizon grommet holes. To use on Morrison Network, spacers must be requested through Customer Service. The required cutout in the worksurface is 3" x 1.77", which includes room for the threaded stud (actual hole in the grommet plate is 2" x 1.77").

## Fixed Table Mounting:

Installers will need to drill a permanent hole into the worksurface so the mast will be fixed to a dedicated location on the worksurface. Please note with this mounting, the mast will not be able to be moved without leaving a permanent hole. The worksurface must be of adequate structure and we recommend a minimum of 1 1/8" thick solid core for adequate structural integrity. Knoll cannot be held responsible for the structural integrity of non-Knoll worksurfaces.

## **Crinion Open Table Center Channel Mounting:**

This mount is intended to provide maximum worksurface or desk usage by mounting to the center channel. Note that when used for individuals, you will need to stagger users across the table.

## **Dividends Horizon Benching Mounting:**

This mount is intended to provide maximum worksurface or desk usage by mounting in between worksurfaces. It clamps to worksurfaces ranging from 3/8" to 15/8". Note that when used for individuals, you will need to stagger users across the table. This mount is designed for use with Dividends Horizon flat profile panel trim, and is not compatible with radius profile.

## Antenna Table Center Beam Center Mounting:

This mount is intended to provide maximum worksurface or desk usage by mounting to the center beam. Note that when used for individuals, you will need to stagger users across the table.

## Antenna Table Center Beam Side Mounting:

This mount allows you to clear the flip door while allowing for maximum worksurface usage and individual height adjustment without the need to stagger users. Please note a screen can be mounted in the center beam with a monitor arm in front of it. The fit will be snug and flush with the

## **Slat Wall Mast Mounting:**

For single monitor mounting, you can use either the slat wall mast mount or direct slat wall mount. For double or triple monitor mounting, you must use the slat wall mast mount. The slat wall direct mount cannot be used for multiple monitors.

Works with most Knoll slat board and slat wall profiles, however, load ratings vary across products and mounting approaches. Please review product breakdown on the following pages to ensure compatibility with your specific application needs.

129

Orchestra/KnollExtra slat board must be mounted to an architectural wall if a flat panel monitor arm is to be mounted to it. You can only use this slat board when it is wall-mounted as outlined below. Knoll cannot be held responsible for the structural integrity of a wall so please work with clients to ensure their wall is structurally sound to hold the slat board, the arm configuration and the monitor weight.

# Slat Wall Direct Mounting (for both standard and compact arm):

For single monitor mounting, you can use either the slat wall mast mount or direct slat wall mount. For double or triple monitor mounting, you must use the slat wall mast mount. The slat wall direct mount cannot be used for multiple monitors.

Please note that the Compact Arm Direct Wall Mount is specific to the compact arm. You cannot use the standard mount with the compact arm or a standard arm with the compact mount.

Works with most Knoll slat board and slat wall profiles, however, load ratings vary across products and mounting approaches. Please review product breakdown on the following pages to ensure compatibility with your specific application needs.

Orchestra/KnollExtra slat board must be mounted to an architectural wall if a flat panel monitor arm is to be mounted to it. You can only use this slat board when it is wall-mounted as outlined below. Knoll cannot be held responsible for the structural integrity of a wall so please work with clients to ensure their wall is structurally sound to hold the slat board, the arm configuration and the monitor weight.

## Direct Wall Mast Mounting:

For single monitor mounting, you can use either the direct wall mast mount or direct wall mount. For double or triple monitor mounting, you must use the wall mast mount. The direct wall mount cannot be used for multiple monitors.

For use on architectural walls only as outlined further on this page. Knoll cannot be held responsible for the structural integrity of a wall so please work with clients to ensure their wall is structurally sound to hold the arm configuration and the monitor weight. See above for weight limits if mounting slat wall to an architectural wall

# Direct Wall Mounting (for both standard and compact arm):

For single monitor mounting, you can use either the direct wall mast mount or direct wall mount. For double or triple monitor mounting, you must use the wall mast mount. The direct wall mount cannot be used for multiple monitors.

Please note that the Compact Arm Direct Wall Mount is specific to the compact arm. You cannot use the standard mount with the compact arm or a standard arm with the compact mount.

# Sapper<sup>TM</sup> Monitor Arm Collection Mounting, Construction and Application Information

For use on architectural walls only as outlined further on this page. Knoll cannot be held responsible for the structural integrity of a wall so please work with clients to ensure their wall is structurally sound to hold the arm configuration and the monitor weight. See above for weight limits if mounting slat wall to an architectural wall

# Sapper 50 Direct Wall Mounting (for Sapper 50 monitor arm):

For single monitor mounting, you can use either the direct wall mast mount or direct wall mount.

Please note that the Sapper 50 Direct Wall Mount is specific to the Sapper 50 arm. You cannot use the standard mount with the Sapper 50 arm or a standard arm with the Sapper 50 mount.

For use on architectural walls only as outlined further on this page. Knoll cannot be held responsible for the structural integrity of a wall so please work with clients to ensure their wall is structurally sound to hold the arm configuration and the monitor weight.

#### Interpole Mounting

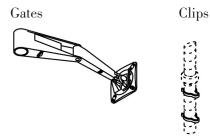
Sapper arms can be mounted on either the slot or channel sides of Interpole with the proper mount. Mounts can be moved after installation but the pole may have residual markings.

If screens are mounted on the slot side, use the channel mount. If overheads are mounted on the slot side, then a SapperXYZ with extended channel mount will be necessary for full adjustability.

#### **Cable Management:**

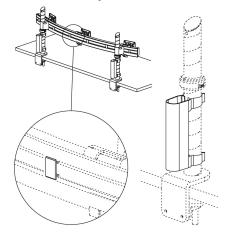
#### Monitor Arms

External cable management allows for easy installation and removal of monitors. There are gates under the arm that will contain wires from the monitor to plastic cable management clips that go on the mast to keep wires tidy to the electrical socket.



#### Beams

For the beam solutions, there are beam cord management clips on the back of the beam (6 on the small, 8 on the medium) that can hold wires from the monitor to the mast cable management. The beam mast cable management is wider than the standard mast cable management to accommodate multiple monitor wires.



#### Adjustment:

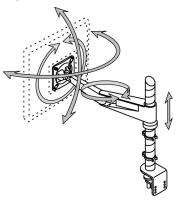
The Sapper monitor arm collection offers intuitive adjustment. To adjust the height, you simply manually lift the arm and twist the adjustment knob like a screw up or down the mast to a comfortable setting. The easiest way to lift the monitor is to fold it in before making the adjustment. To adjust the depth, you can move the arm in or out. You can also rotate the monitor 360 degrees for landscape or portrait viewing and adjust the swivel back and forth 180 degrees and tilt up and down 165 degrees. The arm folds in and out from  $2\frac{7}{8}$ " fully compressed to approximately 17" when fully extended.

130

#### Height Adjustment



Rotation, Swivel, Tilt and Depth Adjustment

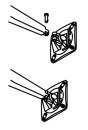


#### Fast Release:

#### Monitor Arms

Allows for swift installation and removal of flat panel monitors by merely popping the quick release pin up to remove monitor with movement joint/back plate attached.

Fast Release



#### Beams

Allows for swift installation and removal of flat panel monitors by merely pulling the bottom of the movement joint slide toward the user from the beam while lifting the top of the monitor up.

For installations with Fast Release Wall Cords, simply pull the cord down while lifting the top of the monitor up.

#### Theft Deterrence:

All movement joints come with a set screw within the fast release pin, to prevent fast release if so desired. Also there is a set screw at the top of the mast to deter removal of the entire arm and monitor from the mast.

Deactivate Fast Release with Set Screw



Set Screw to Prevent Arm Removal



#### Compatibility:

The Sapper Monitor Arm Collection is not compatible with the Wishbone Flat Panel Monitor Support System (i.e., Wishbone, Zorro or Rotation arms, posts, tool bars, brackets, mounting, etc.). They have been designed independently and as such parts from one system cannot be used with the other.

Monitors cannot be mounted on KnollExtra®/ Orchestra® load bars.

#### Installation Instructions:

Comprehensive installation instructions will be shipped with product and are also available on Knoll Exchange for easy reference.

#### Construction:

Arm: die cast aluminum with a cold rolled steel top plate

Mast: anodized aluminum extrusion

Beam: satin anodized extruded aluminum

Adjustment knob: nylon undermold with a TPU

Movement joint (includes fast release monitor plate): plastic bushings, zinc and plastic molded plastic tilt friction components and glass filled nylon VESA plate

Movement joint slide: aluminum, powder coated silver

VESA plate adaptors: steel

Table clamp, grommet mount, fixed table mount, COT Center channel mount, DH Benching mount, Antenna center beam center mount: steel

Slat wall and wall mounts (both mast mount and direct, both standard and compact sizes): die cast aluminum with steel back plates

Double arm bracket: die cast aluminum, steel top plate, extruded aluminum posts, plastic upper and lower bushings

Triple support arm bracket: die cast aluminum, steel top plate, extruded aluminum posts, plastic upper and lower bushings

 $\label{eq:mast-to-beam} \mbox{ Mast-to-beam bracket: aluminum, powder coated silver}$ 

Cable management: transparent polycarbonate clips on the mast and beam; plastic gates under standard arms

Antenna and Quadruple support arm bracket: die cast aluminum

Two-Piece Table Clamp, Deep Table Clamp, Heavy-Duty Table, Clamp, Grommet, Fixed Table, Crinion Open Table Center Channel, Dividends Horizon Benching and Antenna Center Beam Table Mounting: steel

Antenna Table Center Beam Side Mounting: die-cast Aluminum

Slat Wall and Wall Mounts both Direct Mast Mounting, Direct Mounting and Sapper 50 Direct Mounting (for both standard and compact arms): Die-cast Aluminum with steel back plates

Quadruple arm bracket: Die-cast Aluminum

# Sapper<sup>TM</sup> Monitor Arm Collection Mounting, Construction and Application Information

#### Sapper Monitor Arm Collection Mounting Options by Product Line

	Two-Piece Table Clamp	Deep Table Clamp	Heavy Duty Table Clamp	Grommet Mount	Fixed Table Mount	Crinion Open Table Center Channel Mount	Dividends Horizon Benching Mount	Antenna Center Beam Center / Side Mounts	Slat Wall* Direct Wall Mounts*
Morrison	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Morrison Network	No	No	No	Yes, but needs spacer through CPD	Yes	No	No	No	No
Currents	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes
Autostrada AS1	Yes (non tapered edge only)	Yes	Yes	Yes	Yes	No	No	No	Yes
Autostrada AS2	Yes (non tapered edge only)	Yes	Yes	Yes	Yes	No	No	No	No
Autostrada AS3	Yes (non tapered edge only)	Yes	Yes	Yes	Yes	No	No	No	Yes
Crinion Open Table / AS4	Yes (non tapered edge only)	Yes	Yes	No	Yes	Yes	No	No	Yes**
Reff	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Dividends Horizon	Yes	Yes	Yes	No	Yes	No	Yes	No	Yes**
Equity	Yes	Yes	Yes	No	Yes	No	No	No	No
Cascade Edge Worksurfaces	Yes (non tapered edge only)	Yes	Yes	Yes	Yes	No	No	No	No
Template	Yes	Yes	Yes	No	Yes	No	No	No	No
Graham Collection	Yes	Yes	Yes	No	Yes	No	No	No	No
Antenna	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No
Upstart	Yes	Yes	Yes	No	Yes	No	No	No	No
Interaction	Yes	Yes	Yes	No	Yes	No	No	No	No
Magnusson	Yes	Yes	Yes	Yes	Yes	No	No	No	No
Propeller	Yes	Yes	Yes	Yes	Yes	No	No	No	No

<sup>\*</sup>See Slat Wall and Direct Wall Weight Limits and Notes in the following chart.

#### **Slat Wall Mounting Weight Limits**

Note: Weight limit per arm is 20 lbs. for standard, compact and sleeve monitor arms unless weight limit for mounting option specified is less. Weight limit per arm is 50 lbs. for Sapper 50 arm and sleeve unless weight limit for mounting option specified is less.

	Currents Spine / Autostrada AS1 Spine		Autostrada Applied Wall / AS3		Dividends Horizon panel		KnollExtra / Orchestra® slat		Crinion Open Table Center Screen		Reff / Autostrada AS2 P Vertical Panel							
	Standard, Compact, Sleeve	Sapper 50 arm	Sapper 50 sleeve	Standard, Compact, Sleeve	Sapper 50 arm	Sapper 50 sleeve	Standard, Compact, Sleeve	Sapper 50 arm	Sapper 50 sleeve	Standard, Compact, Sleeve	Sapper 50 arm	Sapper 50 sleeve	Standard, Compact, Sleeve	Sapper 50 arm	Sapper 50 sleeve	Standard, Compact, Sleeve	Sapper 50 arm	Sapper 50 sleeve
Direct Mount	20 lbs.	N/A	N/A	20 lbs.	N/A	N/A	20 lbs.	N/A	N/A	20 lbs.	N/A	N/A	15 lbs.	N/A	N/A	20 lbs.	N/A	N/A
Mast Mount																		
8" Mast	60 lbs.	22.5 lbs	. 50 lbs.	60 lbs.	22.5 lbs.	50 lbs.	10 lbs.	N/A	N/A	45 lbs.	22.5 lbs.	45 lbs.	15 lbs.	N/A	N/A	60 lbs.	27.5 lbs.	50 lbs.
12" Mast	60 lbs.	N/A	50 lbs.	60 lbs.	N/A	50 lbs.	7.5 lbs.	N/A	N/A	45 lbs.	22.5 lbs.	45 lbs.	10 lbs.	N/A	N/A	60 lbs.	25 lbs.	50 lbs.
16" Mast	50 lbs.	N/A	50 lbs.	50 lbs.	N/A	50 lbs.	5 lbs.	N/A	N/A	30 lbs.	22.5 lbs.	30 lbs.	5 lbs.	N/A	N/A	60 lbs.	25 lbs.	50 lbs.
24" Mast	30 lbs.	N/A	50 lbs.	30 lbs.	N/A	30 lbs.	N/A	N/A	N/A	15 lbs.	N/A	N/A	N/A	N/A	N/A	60 lbs.	22.5 lbs	50 lbs.
32" Mast	20 lbs.	N/A	50 lbs.	20 lbs.	N/A	20 lbs.	N/A	N/A	N/A	15 lbs.	N/A	N/A	N/A	N/A	N/A	60 lbs.	20 lbs.	50 lbs.
	Note: No maximum total load limit.  Note: Mounting requires special mount plate through CPD as slat wall pitch is different than other AS product; No maximum total load limit.		Note: Maximum total load limit is 30 lbs. per slat wall.  Note: Can only be mou on a structural architec wall; Must use one Orchestra® wall mount bracket (0R-BKT-WM arm installed on 24" on maximum; No maximu load limit.		int (M) per on center													

### **Mounting Option Weight Limits**

						Weight Limit						
	8" & 12" & 16"				24"				32"			
Mounting Option	Standard, Compact, Sleeve	Sapper 50	Sapper 50 double	Sapper 50 sleeve arm	Standard, Compact, Sleeve	Sapper 50	Sapper 50 double	Sapper 50 sleeve arm	Standard, Compact, Sleeve	Sapper 50	Sapper 50 double	Sapper 50 sleeve arm
Two-Piece Table Clamp*	60 lbs.	50 lbs.	60 lbs.	50 lbs.	75 lbs.	40 lbs.	50 lbs.	50 lbs.	75 lbs.	35 lbs.	45 lbs.	50 lbs.
Deep Table Clamp*	60 lbs.	50 lbs.	32 lbs.	50 lbs.	75 lbs.	42 lbs.	30 lbs	50 lbs.	75 lbs.	42 lbs.	20 lbs.	50 lbs.
Heavy Duty Table Clamp*	60 lbs.	50 lbs.	60 lbs.	50 lbs.	120 lbs.	42 lbs.	50 lbs.	50 lbs.	120 lbs.	40 lbs.	45 lbs.	50 lbs.
Grommet Mount	60 lbs.	50 lbs.	65 lbs.	50 lbs.	45 lbs.	45 lbs.	60 lbs.	100 lbs.	45 lbs.	40 lbs.	50 lbs.	100 lbs.
Fixed Table Mount	80 lbs.	50 lbs.	60 lbs.	50 lbs.	85 lbs.	50 lbs.	55 lbs.	100 lbs.	85 lbs.	50 lbs.	50 lbs.	100 lbs.
Crinion Open Table Center Channel Mount	60 lbs.	50 lbs.	N/A	50 lbs.	40 lbs.	40 lbs.	N/A	50 lbs.	40 lbs.	35 lbs.	N/A	50 lbs.
Dividends Horizon Benching Mount	60 lbs.	50 lbs.	N/A	50 lbs.	40 lbs.	40 lbs.	N/A	50 lbs.	40 lbs.	35 lbs.	N/A	50 lbs.
Antenna Center Beam Center Mount	80 lbs.	50 lbs.	90 lbs.	50 lbs.	100 lbs.	50 lbs.	70 lbs.	100 lbs.	100 lbs.	50 lbs.	50 lbs.	100 lbs.
Antenna Center Beam Side Mount*	60 lbs.	50 lbs.	80 lbs.	50 lbs.	100 lbs.	50 lbs.	60 lbs.	100 lbs.	100 lbs.	50 lbs.	50 lbs.	100 lbs.

Note: For standard, compact and sleeve arms, mast heights 8", 12" and 16" maximum load limit achieved using quadruple monitor arm bracket. 24" and 32" mast maximum load limit achieved using quadruple monitor arm bracket or stacking arms.

Note: For Sapper 50 arms, mast heights 8", 12" and 16" maximum load limit achieved using single arm. 24" and 32" mast maximum load limit achieved using single arm or stacking arms.

Note: single/double/triple/quadruple solutions can hold 20 lbs. per arm, Sapper 50 single can hold up to 50 lbs. per arm, Sapper 50 double can hold up to 30 lbs. per arm.

#### **Interpole Mounting Weight Limits**

Note: Inerpole can hold 100 lbs. of weight per side, on a maximum of two opposite sides.

#### Wall Mounting Weight Limits

Note: for Standard arms, weight limit per arm is 20 lbs., unless weight limit for mounting option specified is less.

 $Note: For Sapper \ 50 \ single, weight \ limit \ per \ arm \ is \ 50 \ lbs., unless \ weight \ limit \ for \ mounting \ option \ specified \ is \ less.$ 

Note: For Sapper 50 double, weight limit per arm is 30 lbs., unless weight limit for mounting option specified is less.

	Standard,			
	Compact, Sleeve	Sapper 50	Sapper 50 double	Sapper 50 sleeve arm
Direct Mount	20 lbs.	50 lbs.	N/A	50 lbs.
Mast Mount:				
8" Mast	75 lbs.	50 lbs.	60 lbs.	50 lbs.
12" Mast	75 lbs.	47.5 lbs.	60 lbs.	50 lbs.
16" Mast	75 lbs.	45 lbs.	60 lbs.	50 lbs.
24" Mast	75 lbs.	42.5 lbs.	60 lbs.	50 lbs.
32" Mast	70 lbs.	32.5 lbs.	60 lbs.	50 lbs.

#### Sapper Multiple Monitor Beam Solutions Weight Limits and Mounting Notes

	•	
Standard movement joint slide	Sapper 50 movement joint slide	
s):		
100 lbs	200 lbs	
ors):		
200 lbs	200 lbs	
200 lbs	200 lbs	
	joint slide  s):  100 lbs  100 lbs  100 lbs  100 lbs  200 lbs	

<sup>\*</sup>Note: You can purchase pieces outside of kits and support additional monitors that will physically fit, only up to weight limits listed. 20 lbs per standard monitor mount, 50 lbs per Sapper 50 monitor mount

<sup>\*\*</sup>Not an option for Sapper 50 monitor arm.

<sup>\*</sup>Quadruple monitor arm not an option.

standard finish

list price

\$407.

477.

418.

391.

408.

silver finish

list price

\$468.

547.

481.

449.

468.

## Sapper XYZ® Monitor Arm Series Easy Order Sapper XYZ Single Arm Kits by Richard Sapper

Kit includes everything needed to mount one monitor to a worksurface: Sapper XYZ monitor arm, movement joint, cable management clips and mounting option (see right for options).

description Two-piece Table Clamp Mount

Sapper XYZ monitor arm table clamp kit



Deep Table Clamp Mount

Sapper XYZ monitor arm deep table clamp kit



Grommet Mount

Sapper XYZ monitor arm grommet mount kit



Fixed Table Mount



Sapper XYZ monitor arm fixed table mount kit

Antenna Center Beam Side Mount Sapper XYZ monitor arm Antenna center beam side mount kit



## Order Code

Example:	XYZ-MA-S-CLMP-K- (111)
XYZ	Sapper XYZ
MA	Monitor arm
S	Single arm
CLMP	Two-piece table clamp mounting option
K	Kit
111	Iet Black Finish

#### **Ordering Information**

Silver Monitor Arm Finish Option:

le:	XYZ-MA-S-CLMP-K- (111)	Specify: 1. Pattern number
	Sapper XYZ	2. Finish
	Monitor arm	Kits do not require any additional
	Single arm	mounting specifications.
	Two-piece table clamp	Standard Monitor Arm Finish
	mounting option	Options:
	Kit	Jet Black (111)
	Jet Black Finish	Medium Grey (115) Bright White (118)
		D118111 W 1111C (1110)

Silver (613)

Mount Finish Option Note:

All mounting options come in a black finish, with the exception of the Antenna Center Beam Side Mount which will come in the same finish color that was specified for

Arm Finish Option Note: All monitor arm finishes are monochromatic with the exception of Bright White, which has a light grey shroud.

134

#### **Mounting and Application Information**

See page 152 for comprehensive mounting, application and construction information.

pattern no.

XYZ MA S CLMP K ( )

XYZ MA S CLMP DP K ()

XYZ MA S GRMT K()

XYZ MA S FTM K()

XYZ MA S ANT SIDE K ()

# hnology Managemen

# Sapper XYZ® Monitor Arm Series Easy Order Sapper XYZ Single Arm Kits by Richard Sapper

Kit includes everything needed to mount one monitor to a worksurface: Sapper XYZ monitor arm, movement joint, cable management clips and mounting option (see right for options).

type	description
Interpole Slot Mount	Sapper XYZ monitor arm Intepole slot mount kit
Interpole Direct Channel Mount	Sapper XYZ monitor arm Intepole direct channel mount kit
Interpole Extended Channel Mount	Sapper XYZ monitor arm Intepole extended channel mount kit

pattern no.	silver finish list price	standard finish list price
XYZ MA S POLE SLOT K	\$524.	\$456.
XYZ MA S POLE DCH K	585.	509.
XYZ MA S POLE ECH K	646.	562.

#### Order Code

Example:	XYZ-MA-S-CLMP-K- (111)
XYZ	Sapper XYZ
MA	Monitor arm
S	Single arm
CLMP	Two-piece table clamp mounting option
K	Kit
111	Let Black Finish

### Ordering Information

MP-K
Specify:

1. Pattern number
2. Finish

Kits do not require any additional mounting specifications.

c clamp
n

Options:
Jet Black (111)
Medium Grey (115)
Bright White (118)

Silver Monitor Arm Finish Option:
Silver (613)

Mount Finish Option Note:

All mounting options come in a black finish, with the exception of the Antenna Center Beam Side Mount which will come in the same finish color that was specified for the arm.

Arm Finish Option Note:
All monitor arm finishes are monochromatic with the exception of Bright White, which has a light grey shroud.

#### Mounting and Application Information

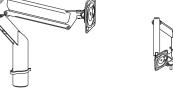
See page 152 for comprehensive mounting, application and construction information.

## Sapper XYZ® Monitor Arm Series Easy Order Dual Sapper XYZ Arm Kit by Richard Sapper

description

Dual Two-Piece Table Clamp Mount Dual Sapper XYZ monitor arm table clamp kit





Kit includes everything needed to mount one monitor to a  $work surface: Sapper\ XYZ\ monitor$ arm, movement joint, cable management clips and mounting option (see right for options).

Order Code	Ordering Information

Specify:

Silver (613)

Silver Monitor Arm Finish Option:

Example:	XYZ-MA-S-CLMP-K- (111)	
XYZ	Sapper XYZ	
MA	Monitor arm	
S	Single arm	
CLMP	Two-piece table clamp	
	mounting option	
K	Kit	
111	Jet Black Finish	

 Pattern number
 Finish All mounting options come in a black finish, with the exception of the Antenna Center Beam Side Kits do not require any additional mounting specifications. Mount which will come in the same finish color that was specified for Standard Monitor Arm Finish Options: Jet Black (111) Arm Finish Option Note: All monitor arm finishes are Medium Grey (115) Bright White (118)

Mount Finish Option Note:

monochromatic with the exception of Bright White, which has a light grey shroud.

pattern no.	silver finish list price	standard finisl list price
XYZ MA D CLMP K ( )	\$911.	\$793

### **Mounting and Application Information**

See page 152 for comprehensive mounting, application and construction information.

standard finish

list price

718.

## Sapper XYZ® Monitor Arm Series Easy Order Sapper XYZ Crossbar Kits by Richard Sapper

Kit includes everything needed to mount two monitors to a worksurface: Sapper XYZ Crossbar monitor arm, two movement joints, cable management clip and 2 fastener strips and mounting option (see right for options).

description

Two-Piece Table Clamp Mount

Sapper XYZ Crossbar monitor arm table clamp kit



Deep Table Clamp Mount

Sapper XYZ Crossbar monitor arm deep table clamp kit



Sapper XYZ Crossbar monitor arm grommet mount kit



Fixed Table Mount

Sapper XYZ Crossbar monitor arm fixed table mount kit



XYZ MA C CLMP K ()	\$772.	\$671.
XYZ MA C CLMP DP K ( )	913.	794

silver finish

list price

825.

XYZ MA C FTM K ( )	784.	682.

Order Code		
XYZ-MA-C-CLMP-K- (111)		
Sapper XYZ		
Monitor arm		
Crossbar		
Two-piece table clamp mounting option		
Kit		
Jet Black Finish		

**Ordering Information** 

mounting specifications. Standard Monitor Arm Finish

Kits do not require any additional

Silver Monitor Arm Finish Option:

1. Pattern number

Options: Jet Black (111) Medium Grey (115) Bright White (118)

Silver (613)

Specify:

2. Finish

Mount Finish Option Note:

All mounting options come in a black finish, with the exception of the Antenna Center Beam Side Mount which will come in the same finish color that was specified for Due to extensive adjustability of Sapper XYZ monitor arms, a mock-up is recommended to ensure

### **Mounting and Application Information**

See page 152 for comprehensive mounting, application and construction information.

pattern no.

XYZ MA C GRMT K ()

it is suited for the specific workstation, particularly if placed in front of a wall or panel.

Order Notes

standard finish

887.

# Sapper XYZ® Monitor Arm Series Easy Order Sapper XYZ Crossbar Kits by Richard Sapper

Kit includes everything needed to mount two monitors to a worksurface: Sapper XYZ Crossbar monitor arm, two movement joints, cable management clip and 2 fastener strips and mounting option (see right for options). Antenna Center Beam Side Mount
Sapper XYZ Crossbar monitor arm Antenna center beam side mount kit

Interpole Slot Mount

Sapper XYZ Crossbar monitor arm Intepole slot mount kit



Interpole Direct Channel Mount

Sapper XYZ Crossbar monitor arm Intepole direct channel mount kit



pattern no.	list price	list price \$718.	
XYZ MA C ANT SIDE K ( )	\$825.		
XYZ MA C POLE SLOT K	1,002.	871	

silver finish

1,020.

#### **Ordering Information Order Notes** Order Code Example: XYZ-MA-C-CLMP-K-Mount Finish Option Note: Due to extensive adjustability of Specify: Sapper XYZ monitor arms, a mock-up is recommended to ensure (111) 1. Pattern number All mounting options come in a XYZ Sapper XYZ 2. Finish black finish, with the exception of it is suited for the specific MA Monitor arm the Antenna Center Beam Side workstation, particularly if placed in front of a wall or panel. Kits do not require any additional Mount which will come in the same mounting specifications. Crossbar finish color that was specified for CLMP Two-piece table clamp Standard Monitor Arm Finish mounting option Options: Jet Black (111) Medium Grey (115) 111 Jet Black Finish Bright White (118) Silver Monitor Arm Finish Option: Silver (613)

142

Mounting and Application Information

See page 152 for comprehensive mounting, application and construction information.

XYZ MA C POLE DCH K

\$86.

139.

91.

65.

86.

151.

## Sapper XYZ® Monitor Arm Series Mounting Options for Sapper XYZ Single Arms by Richard Sapper

description

Sapper XYZ two-piece table clamp



 $Interchangeable\ mounting\ options$ provide flexibility

Sapper XYZ deep table clamp



Sapper XYZ grommet mount



Sapper XYZ fixed table mount



Sapper XYZ Antenna center beam side mount



Sapper XYZ Interpole direct channel mount



Sapper XYZ Interpole extended channel mount



Sapper XYZ Interpole slot mount



Sapper XYZ dual two-piece table clamp



#### Order Code

## Example: XYZ-CLMP Sapper XYZ

XYZ Two-piece table clamp mounting option

**Ordering Information** 

Specify:

1. Pattern number

Antenna Center Beam Side Mount Finish Options: Jet Black (111) Medium Grey (115) Bright White (118) Silver (613)

Mount Finish Option Note:

All mounting options come in a black finish, with the exception of the Antenna Center Beam Side Mount which will come in the same finish color that was specified for the arm.

# XYZ POLE DCH 188. XYZ POLE ECH 209. XYZ POLE SLOT 134.

#### **Mounting and Application Information**

See page 152 for comprehensive mounting, application and construction information.

pattern no.

XYZ CLMP

XYZ CLMP DP

XYZ GRMT

XYZ FTM

XYZ ANT SIDE

XYZ D CLMP

## Sapper XYZ® Monitor Arm Series Sapper XYZ Crossbar Mounting Options by Richard Sapper

description

Sapper XYZ Crossbar two-piece table clamp





Seven interchangeable mounting options provide flexibility

Sapper XYZ Crossbar deep table clamp



Sapper XYZ Crossbar grommet mount



Sapper XYZ Crossbar fixed table mount



Sapper XYZ Crossbar Antenna center beam side mount



Sapper XYZ Crossbar Interpole slot mount



Sapper XYZ Crossbar Interpole direct channel mount



pattern no.	110
XYZ C CLMP	\$103
XYZ C CLMP DP	231
XYZ C GRMT	154
XYZ C FTM	128
XYZ C ANT SIDE	154
XYZ C POLE SLOT	333
XYZ C POLE DCH	323

#### Order Code

Example: XYZ-C-CLMP

XYZ-C Sapper XYZ Crossbar CLMP Two-piece table clamp

mounting option

Antenna Center Beam Side Mount Finish Options: Jet Black (111) Medium Grey (115) Bright White (118)

Specify:

Silver (613)

#### **Ordering Information**

Mount Finish Option Note: 1. Pattern number All mounting options come in a

black finish, with the exception of the Antenna Center Beam Side Mount which will come in the same finish color that was specified for the arm.

### **Ordering Notes**

Due to extensive adjustability of Sapper XYZ monitor arms, a mock-up is recommended to ensure it is suited for the specific workstation, particularly if placed in front of a wall or panel.

#### **Mounting and Application Information**

See page 152 for comprehensive mounting, application and construction information.

pattern no.

# nology Management

# Sapper XYZ® Monitor Arm Series Replacement Parts for Sapper XYZ Single Arms by Richard Sapper

description

Arms and cable management clips can be ordered separately.

Sapper XYZ monitor arm (includes movement joint)



Sapper XYZ movement joint (includes fast release pin)



Sapper XYZ cable management clip for post (set of 10)

S

Sapper XYZ cable management block for channel (set of 10)

6

pattern no.	silver finish list price	standard finish list price
XYZ MAS()	\$413.	\$359.
XYZ MJ	n/a	51.
XYZ MA CLIP	n/a	28.
ATZ WA GLIP	ıνa	20.
XYZ MA BLOCK	n/a	28.

#### Order Code

# Example: XYZ-MA-S-111 XYZ Sapper XYZ MA Monitor arm S Single monitor arm 111 Jet Black finish

### Ordering Information

Specify:

1. Pattern number

2. Finish

Standard Monitor Arm Finish
Options:

Jet Black (111) Medium Grey (115) Bright White (118)

 ${\it Silver \, Monitor \, Arm \, Finish \, \, Option:} \\ {\it Silver \, (613)}$ 

Arm Finish Option Note: All monitor arm finishes are monochromatic with the exception of Bright White, which has a light grey shroud.

### Mounting and Application Information

See page 152 for comprehensive mounting, application and construction information.

51.

# Sapper XYZ® Monitor Arm Series Sapper XYZ Crossbar Replacement Parts by Richard Sapper

description

Kit includes everything needed to mount two monitors to a worksurface: Sapper XYZ Crossbar monitor arm, two movement joints, cable management clip and 2 fastener strips and mounting option (see right for options). Sapper XYZ monitor arm (includes Crossbar and two movement joints)



Sapper XYZ Crossbar (includes two movement joints)



Sapper XYZ Crossbar cable management clip for post (set of 10)



Sapper XYZ Crossbar cable management fastener strip (set of 10)



Sapper XYZ movement joint (includes fast release pin)



pattern no.	silver finish list price	standard finish list price
XYZ MA C()	\$725.	\$630.
XYZ CROSS ( )	472.	410.
	71.2.	410.
XYZ MA C CLIP	n/a	31.
ATE IIIA O OEII	104	91.
XYZ MA C STRIP	n/a	31.

Order Cod	de	Ordering Information	Ordering Note	Mounting and Application Information
Example: XYZ MA C 1111	XYZ-MA-C-111 Sapper XYZ Monitor arm Crossbar monitor arm Jet Black finish	Specify: 1. Pattern number 2. Finish Standard Monitor Arm Finish Options: Jet Black (111) Medium Grey (115) Bright White (118) Silver Monitor Arm Finish Option: Silver (613)	Due to extensive adjustability of Sapper XYZ monitor arms, a mock-up is recommended to ensure it is suited for the specific workstation, particularly if placed in front of a wall or panel.	See page 152 for comprehensive mounting, application and construction information.

150

151

SAP MJ

# Sapper XYZ® Monitor Arm Series Mounting, Construction and Application Information

All Sapper XYZ monitor arms:
• Ship standard with fast release

- movement joint
- Offer 360 degrees of pivot at the base and at the elbow joint
- Offer 153 degrees of monitor tilt up and down, 180 degrees of swivel left and right and 360 degrees of rotation for portrait and landscape viewing

Sapper XYZ Single monitor arms:

- Maximum weight of 20 lbs. per arm \*
- Fold into themselves to be highly compact at less than 2 inches when fully compressed
- Are durable and lightweight (weighs only 4 pounds)

Sapper XYZ Crossbar monitor arms:

- Maximum weight of 18.5 lbs. per movement joint, 37 lbs. total
- Folds into itself to be 7.38" when fully compressed

\*Please note this limit accommodates up to 95% of monitors on the market.

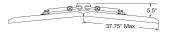
#### Size Limits:

Monitor Arms

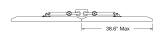
There is no specific maximum size for a Sapper XYZ single monitor arm (outside the limitations of the space in which you are trying to put it).

For Dual Sapper XYZ, the maximum outer horizontal width per monitor is 37.75" for a cockpit solution or 38.6" for a flat positioning flush next to each other.

#### Dual Sapper XYZ



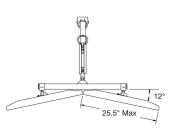
Double Cockpit



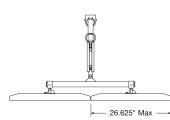
#### Double Flat

For Sapper XYZ Crossbar, the maximum outer horizontal width per monitor is 25.5" for a cockpit polution or 26.625" for a flat positioning flush next ot each other.

Sapper XYZ Crossbar



Double Cockpit



#### Double Flat

Key Note: Flat panel monitor manufacturers refer to their products by diagonal screen measurements. So a 19" widescreen monitor has a 19" screen measured diagonally, but is not necessarily 19" in horizontal width (refer to manufacturer's specifications for specific overall height and width).

### Monitor Mounting:

All Sapper XYZ monitor arms are compatible with the international Video Electronics Standard Association (VESA) industry interface standard (75 mm x 75 mm and  $100 \text{ mm} \times 100 \text{ mm}$  hole patterns or 2.95" x 2.95" and 3.94" x 3.94") adopted by most panel manufacturers. VESA compliancy is a requirement to mount any monitor to a monitor arm. If your customer has a recessed monitor back with only 75 mm x 75 mm holes, additional spacers may be needed to ensure proper fit. Contact Customer Service for more details including part and pricing information.

A VESA plate adaptor may be necessary for larger monitors and televisions and can be ordered separately in the sizes of 100 mm x 200mm (M5 screws), 200mm x

300mm (M8 screws) and 400mm x 400mm/400mm x 600mm (M8 screws). Adaptors ship with separate installation instructions and may require spacers. Knoll VESA plate adaptors ship with screws to attach the adaptor to the Knoll VESA plate but do not ship with screws to attach the adaptor to the monitor or television (see screw sizes listed

above, English size equivalents may

be needed instead); screw length is

dependent on the specific monitor or

200mm (M6 screws), 300mm x

television and screw should be tested prior to installation to ensure correct length. Knoll is not responsible for use of incorrect screws. Knoll and its dealers will not take the responsibility for mounting the monitor to the arm. The end user's IT

monitor to the arm. The end user's IT department must confirm VESA mounting compliance and mount the monitor to the arm using customer's own screws. The most common screws are M5 x 8mm and M5 x 10mm.

Please follow installation instructions closely (available in each kit box shipped as well as on Knoll Exchange).

#### **Apple Computer Note:**

VESA Adapters are required for Thunderbolt Displays and iMacs, available from apple.com. Contact Apple directly for VESA Adaptor options on specific iMac models as some may need to be purchased with integrated VESA Mount Adapters. With these adapters, the displays will mount to the 100mm x 100mm hole pattern. iMac 21.5" can be mounted on Sapper and Sapper XYZ. All other Apple displays must be mounted on Sapper 50 due to weight specifications.

#### Clamp Mounting:

152

Two-Piece Table Clamp Mounting:

The standard two-piece table clamp is easy to install or retrofit and works on most worksurfaces or desks that are a minimum of 1 1/8" thick solid core. The maximum worksurface thickness is 23/4". There are four settings to accommodate a range of worksurface thicknesses. It is important to mock up the table clamp, particularly on competitive product to ensure a proper fit. The clamp is not compatible with Morrison Network.

Deep Table Clamp Mounting:

This clamp is one piece and works on most surfaces. The deep table clamp mount is intended to clear most knife-edge (45 degree angle) desks or worksurfaces.

#### **Grommet Mounting:**

With all systems furniture, it is important to pass monitor and peripheral plugs through grommet mount cover while it is still loose. Please note the grommet mount is compatible with Morrison, Autostrada, Reff. Propeller, but is not compatible with the Graham Collection or Dividends Horizon grommet holes. To use on Morrison Network, spacers must be requested through Customer Service. The required cutout in the worksurface is 3" x 1.77", which includes room for the threaded stud (actual hole in the grommet plate is 1.44" x 1.77").

#### **Fixed Table Mounting:**

Installers will need to drill a permanent hole into the worksurface so the post will be fixed to a dedicated location on the worksurface. Please note with this mounting, the mount will not be able to be moved without leaving a permanent hole. The worksurface must be of adequate structure; Knoll cannot be held responsible for the structural integrity of non-Knoll worksurfaces.

## Antenna Table Center Beam Side Mounting:

This mount allows you to clear the flip door while allowing for maximum worksurface usage and individual height adjustment without the need to stagger users. Please note a screen can be mounted in the center beam with a monitor arm in front of it. The fit will be snug and flush with the screen.

#### Interpole Mounting

SapperXYZ arms can be mounted on either the slot or channel sides of Interpole with the proper mount.

If screens are mounted on the slot side of Interpole use a Direct Channel Mount. If overheads are mounted on the slot side of Interpole, use an Extended Channel Mount (not available for Sapper XYZ Crossbar).

#### **Cable Management:**

External cable management allows for easy installation and removal of monitors and keep wires tidy to the electrical socket. On Sapper XYZ singl arms there is a cable management block in the channel under the arm that will contain wires from the monitor to plastic cable management clips that go on the post. On Sapper XYZ Crossbar, there are two hook and loop fastener strips on the crossbar to neatly drape cables down to the plastic cable management clip attached to the post.

#### Arm Adjustment:

The Sapper XYZ monitor arms collection offers intuitive one touch adjustment. To adjust the height, you simply lift the monitor to the desired position. To adjust the depth, you simply pull or push the monitor in or out. You can also rotate the monitor 360 degrees for landscape or portrait viewing, adjust the swivel back and forth 180 degrees and tilt up and down 153 degrees. The single arm folds in and out from 2" fully compressed to approximately 21" when fully extended. Sapper XYZ Crossbar folds in and out from 7.8" fully compressed to 18.38" when fully extended.

Due to the extensive adjustability of Sapper XYZ monitor arms, a mock-up is recommended to ensure it is suited for the specific workstation, particularly if placed in front of a wall or panel.

#### Weight Adjustment:

The Sapper XYZ and Sapper XYZ Crossbar monitor arm is preset for a 10 lb monitor on a single arm and 18.5 lbs on a Sapper XYZ Crossbar. Other monitor weights up to 20 lbs can be accommodated by adjusting the weight adjustment nut to the proper weight using the Allen key wrench on the back of the movement joint. Note that the 20 lb setting is not visible on the scale. Turn clockwise to decrease weight or counterclockwise to increase weight to appropriate level. The arm should be held in a downward position if increasing the weight and in an upward position if decreasing the weight. When proper weight is set, the arm should stay exactly where you place it.

Temperature Note: Sapper XYZ Crossbar's gas strut weight tolerance performance may be reduced by 1-2 lbs when used in temperatures above or below typical office temperatures.

#### Fast Release:

Allows for swift installation and removal of flat panel monitors by merely popping the quick release pin up to remove monitor with movement joint/back plate attached. Be sure to lift the arm to the highest position before removing monitor, or the arm will quickly move upwards.

#### **Theft Deterrence:**

All movement joints come with a set screw within the fast release pin, to prevent fast release if so desired.

#### Compatibility:

The Sapper XYZ monitor arms are not compatible with the Sapper Monitor Arm Collection. It has been designed independently and as such, parts from one system cannot be used with the other, with the exception of the movement joint. Finish colors are consistent across the Sapper XYZ and Sapper Monitor Arm Collection portfolios.

Monitor arms cannot be mounted on KnollExtra®/ Orchestra® load bars.

#### Installation Instructions:

Comprehensive installation instructions will be shipped with product and are also available on Knoll Exchange for easy reference.

#### Construction:

Arm: die cast aluminum with steel channels and plastic molded shroud

Movement joint (includes fast release monitor plate): plastic bushings, zinc and plastic molded plastic tilt friction components and glass filled nylon VESA plate

VESA plate adaptors: steel

Table clamp, grommet mount, fixed table mount: steel

Cable management: Sapper XYZ single arm: transparent polycarbonate clip on the post; soft

Sapper XYZ Crossbar: transparent polycarbonate clip on post; hook and loop fasterner strips on crossbar

153

Antenna Table Center Beam Side Mounting: die-cast aluminum

plastic in channel under arm

## Adjustable Keyboard Supports Easy Order Kits

type	description	W	d	h
27" Integrated Keybaord Platform	Advanced Easy Lift arm	27"	11"	1.1"
	Advanced Easy Lift arm with dual pivot	27"	11"	1.1"
	Short Easy Lift arm	27"	11"	1.1"
	Sit/Stand arm	27"	11"	1.1"
	Sit/Stand arm with dual pivot	27"	11"	1.1"
21" Swivel Keyboard Platform	Advanced Easy Lift arm	20.7"-29.7"	11"	2.3"
	Advanced Easy Lift arm with dual pivot	20.7"-29.7"	11"	2.3"
	Short Easy Lift arm	20.7"-29.7"	11"	2.3"
	Sit/Stand arm	20.7"-29.7"	11"	2.3"
	Sit/Stand arm with dual pivot	20.7"-29.7"	11"	2.3"
21" Swivel HP Keyboard Platform	Advanced Easy Lift arm	20.7"- 29.7"	11"	2"- 3.2"
	Advanced Easy Lift arm with dual pivot	20.7"- 29.7"	11"	2"- 3.2"
	Short Easy Lift arm	20.7"- 29.7"	11"	2"- 3.2"
	Sit/Stand arm	20.7"- 29.7"	11"	2"- 3.2"
	Sit/Stand arm with dual pivot	20.7"- 29.7"	11"	2"- 3.2"
(\\ / <i>/</i> /				

pattern no.	list price
OAK-27-AL-BK-(16,18,22,23,25)	\$475.
OAK-27-AL-BK-PT-(16,18,22,23,25)	550.
OAK-27-SL-BK-(16,18,22)	435.
OAK-27-SS-BK-(16,18,22,23,25)	575.
OAK-27-SS-BK-PT-(16,18,22,23,25)	650.
OAK-21-AL-BK-(16,18,22,23,25)	500.
OAK-21-AL-BK-PT-(16,18,22,23,25)	575.
OAK-21-SL-BK-(16,18,22)	460.
OAK-21-SS-BK-(16,18,22,23,25)	600.
OAK-21-SS-BK-PT-(16,18,22,23,25)	675.
OAK-21HP-AL-BK-(16,18,22,23,25)	560.
OAK-21HP-AL-BK-PT-(16,18,22,23,25)	635.
OAK-21HP-SL-BK-(16,18,22)	520.
OAK-21HP-SS-BK-(16,18,22,23,25)	660.
OAK-21HP-SS-BK-PT-(16,18,22,23,25)	735.

Order Code		Ordering Information	Application Notes	Construction
Example: OAK- 21HP-AL- BK PT 22	OAK-21HP-AL-BK-PT-22 21" HP platform mounted on Advanced Easy Lift mechanism Dual Pivot 22" track	Specify:  1. Pattern number 2. Track length  Track length options: Options are 16, 17.75, 21.75, 23 and 25 inches.  Minimum clearance required is the length of the track plus 1".	Keyboard support provides users with a more ergonomic working environment by allowing for height and tilt adjustment of the keyboard. When not in use, the keyboard support stores completely under the worksurface to free vital worksurface space.  Dimensions above are for the platform only. For full configuration depths, all component measurements and application suggestions refer to the Keyboard Measurements on Knoll Exchange.  21" Swivel HP platform offers a fully adjustable keyboard support option with height adjustable mousing surface which can be positioned over the numeric keyboard pad allowing for proper neutral posture.  For double mousing surfaces on 21" Swivel and 21" Swivel HP platforms, separate pads are orderable as KR parts.	Platform: All platforms are HDPE. Wristrests are polyurethane mold with polypropylene insert.  Mechanisms: All arms are steel with a powdercoat finish. Tracks are steel with nylon glides.

154

#### **Mechanism Attributes**

All mechanisms have the following features:

- Spring assist adjustmentKnobless height adjustment
- Pivots 360° on the track
- Black textured metal finish

Advanced Easy lift arm:

- Variable height adjustment of 8.8" (up 2.38", down 6.5") Soft touch knob adjusts tilt from
- $10^{\circ}$  to (-)  $20^{\circ}$

## Short easy lift arm:

- Variable height adjustment of 5.1" below the worksurface
- Soft touch knob adjusts tilt from, 10° to (-)20°

#### Sit/Stand arm:

- Variable height adjustment of 14.2" (up 8.3", down 5.9")
  Soft touch knob adjusts tilt from 10° to (-) 15°

Pivot feature:

Allows the keyboard platform to move independently from arm, allowing it to stay parallel to the worksurface as the arm is moved laterally.

Keyboard support must be specified with a sliding track that is less than the depth of the top and anything

below the top such as a power harness or cable basket. For taller individuals, we recommend using a dual pivot solution with the track mounted on the diagonal to maximize knee space.

**Antenna and Tone Mounting Note** 

Antenna:

In order to mount on Antenna Workspace, an adapter is needed, available through the Antenna price list. Pattern code YAK.

In order to mount on Tone T-leg and 24" deep C-Leg tables, an adapter is needed available through the Antenna price list. Pattern code

For 30" deep C-Leg tables, specify the 16" track only.

product	description	type	w	d	h	wgt.
VDT Sleeve	• Creates 175/8" wide VDT corner, 9" from	Metallic finish	263/4"	91/8"	1 1/4"-2 1/2"	3 lbs.
		Soft touch finish	263/4"	91/8"	1 1/4"-2 1/2"	3 lbs.
	Can be adjusted to any angle, or removed when not needed.					
	<ul> <li>Heavy-gauge steel with felt backing to prevent scuffing.</li> </ul>					
	<ul> <li>1 ½", 1 ¾" and 2 ½" worksurface thicknesses.</li> <li>¼" screw holes on underside for optional</li> </ul>					
	attachment to worksurface.  • Available in two metallic and two soft-touch					



- Fits any worksurface thickness or edge profile.
- Creates generous 24" wide VDT corner, 14" fro worksurface corner.
- Can be adjusted to any angle, or removed when needed.
- $\bullet\,$  Integral non-handed mouse pad.

VDT sleeve finishes:

Soft Grey (E)
Medium Metallic Grey (J)
Soft Touch Light Grey (GS)
Soft Touch Black (BS)

Surf Board painted finishes: Soft Grey(E) Medium Metallic Grey (J) Soft Touch Light Grey (GS) Soft Touch Black (BS)

finishes.

- Felt back and rubber bumpers protect worksurface.
  Designed by Ross Lovegrove and Stephen Peart.

е.	Metallic	41 1/2"	161/2"	1"	14 lbs.
rom	finish				
en not	Soft touch finish	41 1/2"	161/2"	1"	14 lbs.

Order Cod	de	Ordering Information	Custom Options	Construction
Example:	OA-SLV-A-E	Specify:	Custom colors available upon	VDT sleeve:
DA-SLV	VDT sleeve	1. Pattern number	sample chip approval. Contact your	Heavy-gauge steel in painted finish. Felt backing protects worksurface.
4	1 1/4" sleeve	A-SLV-A-E $Specify:$ Custom sample  1. Pattern number 2. Thickness (VDT sleeve only) 3. Finish  VDT sleeve worksurface thicknesses: 1 $\frac{1}{4}$ " (A): Equity, Morrison, Reff  1 $\frac{3}{4}$ " (B): Morrison, Reff	Knoll sales representative or Customer Service for complete	0.1
Ē	Soft grey finish		pricing information.	Manufactured in the United States
	VDT sleeve worksurface thicknesses: 1 1/4" (A): Equity, Morrison, Reff			Surf Board: Rigid steel plate with 1" thick rolled front detail. Black rubber bumpers and non-scuffing felt back.

156

pattern no.	list price
OA-SLV(A,B,C)-(E, J)	\$227.
OA-SLV(A,B,C)-(GS, BS)	294.

SF-SB-(E, J)	320.
SF-SB-(GS, BS)	403.

#### **Design Awards**

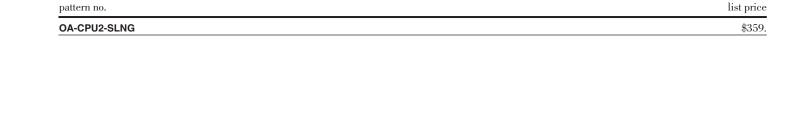
 $VDT\ Sleeve$ 

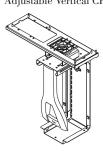
Surf Board: Best of Category Award, Consumer Products, *JD Magazine* Annual Design Review, 1994

384.

# Adjustable CPU Holders Vertical and Sling CPU Holders

product description wgt Adjustable Sling CPU Holder 3.75"-64" • Adjustable Sling CPU Holder, 16" track 10"-61" 4 lbs. Adjustable Vertical CPU Holder • Adjustable Vertical CPU Holder, 16" track 7.5"-9.3" 18.25''-22.5'' 13 lbs.





Order Code	Ordering Information	Additional Information	Construction
Example: OA-CPU2-SLNG OA Office Automation CPU2 CPU SLNG Sling	Specify: 1. Pattern number	Adjustable Sling CPU Holder: Accommodates equipment 2.5"-64" wide by 8"-59" high.  Slides on track under the worksurface and swivels 360° for easy CPU access.  Weight capacity of 75 lbs.  Adjustable Vertical CPU Holder: Accommodates equipment 3.5"-9.3" wide by 13.5"-22.5" high.  Slides on track under worksurface and swivels 360° for easy CPU access.  Weight capacity of 85 lbs.	Adjustable Sling CPU Holder: Black painted glass filled nylon mounting mechanism. Woven nylor sling.  Adjustable Vertical CPU Holder: Black painted steel frame with glas filled nylon slide clamp.  Track: Black painted steel

158

**Mounting Note** CPU holders come standard with a 17" long track. They mount on work surfaces 18" or deeper.

pattern no.

OA-CPU2-MTL

Antenna:

In order to mount on Antenna Workspace, an adapter is needed, available through the Antenna price list. Pattern code YAPCU.

Antenna, Tone and Telescope Mounting

Tone:
In order to mount on Tone T-leg and 24" deep C-Leg, an adapter is needed available through the Antenna price list. Pattern code YACPU. 30" deep C-Leg provides enough track clearance.

Telescope:
Due to legroom clearance, CPUs cannot mount on Telescope tables less than 72" wide. For mounting on tables 72" or wider, only one power supply tray can be installed opposite from the CPU holder.

list price

# rade

# Storage pencil drawers

product	description	w	d	back/front h	wgt.
BackPack® Pencil Drawer	<ul> <li>23"w 111/2"D paper storage.</li> <li>Full width pencil trough.</li> <li>Two removable plastic organizing trays.</li> <li>Black painted steel construction with full extension ball-bearing slides.</li> <li>Optional lock.</li> </ul>	24"	17 <sup>5</sup> /8″	2"	
Optional Lock for	• Non-handed.	1 1/4"	2 1/4"	1 1/4"	5 ozs.
BackPack® Pencil Drawer					
Universal Pencil Drawer	• 7 roomy compartments.	161/2"	223/4"	1 3/4"	5 lbs. 12 ozs.
	<ul> <li>Large rear compartment holds flat, legal files, ruler, etc.</li> </ul>				
	<ul> <li>Slanted card compartment holds index cards,</li> </ul>				
The state of the s	Post-It <sup>TM</sup> Notes or business cards.  • Middle compartment holds White-Out <sup>TM</sup> bottle or				
1 1 1 1 1 1	change.				
	<ul> <li>Front middle compartment holds stapler, pens, scissors, etc.</li> </ul>				
120	• Other compartments holds calculator, clips, pins,				
	<ul><li>etc.</li><li>Available in textured matte black plastic.</li></ul>				
	• Three-quarters extension, ball bearing metal slides				
	with smooth, silent movement.				

BP-PD	\$233
BP-L	69
ORCH-PD-A	282

Order Co	de	Ordering Information	Application Notes	Construction
Example: ORCH-PD-A	ORCH-PD-A Pencil drawer	Specify: 1. Pattern number 2. Lock option (BackPack drawer only)	Pencil Drawers can be used with virtually any Knoll or competitor wood worksurface.  *Universal Pencil Drawer:* Minimum depth worksurface for drawer is 24". On freestanding Morrison Network systems, a 30" deep worksurface is required.  Minimum depth worksurface for drawer is 18". Pencil Drawer attaches 23/8" below the underside of wood worksurfaces at any location. Mounting hardware and template included.  *BackPack Lock option:* Lock attaches to slides in field. Removable for use elsewhere.  Call Customer Service for availability and minimum requirement.	Universal pencil drawer: Durable vacuum-formed ABS plastic drawer in a matte black, textured finish. Three-quarter extension, ball bearing metal slides with smooth, silent movement.  Manufactured in the United States.  Backpack Pencil Drawer: Durable 20-gauge steel painted black. Full-extension ball-bearing metal slides with click-stop in half-open position.  Die-cast zinc lock painted black.  BackPack® Pencil Drawer manufactured in Canada.
			160	

### Design Awards

pattern no.

ROSCOE Award, Interior Design Magazine, 1994. Honorable Mention, Furniture, ID Magazine Annual Design Review, 1994.

list price

\$224.

41.

## Universal Marker Boards by Bruce Hannah & Ayse Birsel

product	description	W	d	h	wgt.		
Marker Board	<ul> <li>½" wide anodized aluminum frame with white</li> </ul>	24"	5/8"	18"	5 lbs. 2 ozs.		
	surface.	30"	<sup>5</sup> /8"	18"	8 lbs. 10 ozs.		
	<ul> <li>Marker Tray option specified separately.</li> <li>Mountable on load bar, panel, wall or top cap.</li> <li>Load bar-mounted brackets included in list price, but specified separately (see Mounting Options below).</li> </ul>	30"	5/8"	24"	11 lbs. 7 ozs.		
		36"	5/8"	18"	10 lbs. 5 ozs.		
		36"	5/8"	24"	13 lbs. 12 ozs.		
		42"	5/8"	24"	16 lbs. 1 oz.		
		42"	5/8"	30"	20 lbs. 1 oz.		
		48"	5/8"	30"	22 lbs. 15 ozs.		
Marker Tray	Anodized aluminum snap-fit tray for Marker Board markers and erasers.	17"	11/4"		5 ozs.		
Mounting Options	Load Bar-Mounted Brackets, Set of 2.						
Mounting Options	Panel-Mounted Brackets (Generic deep)						
	Panel-Mounted Brackets (Generic deep)  Panel-Mounted Brackets (Generic shallow)						
	Panel-Mounted Brackets for Dividends						
	Panel-Mounted Brackets for Morrison						
	Panel-Mounted Brackets for Reff						
	Top Cap-Mounted Brackets (Dividends only)						
	Top Cap-Mounted Brackets (Reff only)						
	Top Cap-Mounted Brackets. Set of 2. (Morrison only)						
	Wall-Mounted Brackets. Set of 2.						

*** **= = * **	#== ··
OR-WB-30-18	336.
OR-WB-30-24	379.
OR-WB-36-18	475.
OR-WB-36-24	527.
OR-WB-42-24	612.
OR-WB-42-30	682.
OR-WB-48-30	785.
OR-WB-TR	59.
OR-WB-LBZ*	7.
OR-WB-PM-B	24.
OR-WB-PM-D	24.
OR-WB-PM-DV	51.
OR-WB-PM-M	38.

<sup>\*</sup> No charge when ordered with Marker or Tack Board

Order Code			
Example:	OR-WB-24-18-BK OR-WB-PM-B OR-WB-TR-BK		
OR-WB-	24" x 18" Marker board		
24-18			
вк	Black frame		
OR-WB- PM	Panel-mounted		
В	Generic Deep		
OR-WB-	Marker tray		
TR			
ВК	Black		

Order Cod	de	Ordering Information		
Example:	OR-WB-24-18-BK OR-WB-PM-B OR-WB-TR-BK	Specify: 1. Pattern number 2. Frame finish	Mounting options:  Rail-Mounted: Standard option.	Wall-Mount number.
OR-WB- 24-18 BK	24" x 18" Marker board Black frame	<ol> <li>Mounting option</li> <li>System suffix (panel and top cap-mounted only)</li> <li>Marker Tray (optional)</li> <li>Marker Tray finish</li> </ol> Anodized finish: Black (BK) Silver (SV) *	Includes load bar clip and adhesive-backed rubber bumper to protect panel fabric and prevent deflection.	
OR-WB-	Panel-mounted		Panel-Mounted: To ensure rigidity, specify two sets and brackets	
B OR-WB-	Generic Deep Marker tray		1 - 35	
TR BK	Black	*Please consult Customer Service for lead times.		

nted: Specify pattern

pattern no.

OR-WB-24-18

OR-WB-PM-R OR-WB-TCM-DV \* OR-WB-TCM-R OR-WB-TCM-M

OR-WB-WM

If your system is not listed, contact your KnollExtra representative or Customer Service for appropriate panel-mounted bracket to specify.

Other writing surface and custom frame colors available. Custom frame sizes available up to 72"W x 48"D in size. High performance porcelain-covered steel market board also available. 25 unit minimum per line item on all customs. Contact your Knoll sales representative or Customer Service for pricing information.

**Custom Options** 

#### Construction

Satin anodized aluminum frame (can be powder coated black). Porcelain coating on cold rolled steel laminated to corrugated and hardboard with a Mylar backing. All Universal Marker Boards are magnetized.

Manufactured in the United States.

## Universal Fabric Boards Standard Sizes

product	description	W	d	h	textile fabric yards
Fabric Boards	• Standard fabric board has 1/2" thick mineral board	24"	1/2"	14"	.66
	construction with squared corner.	24"	1/2"	16"	.66
	Rounded corner or radiused edge, available at	24"	1/2"	18"	.66
	upcharge. • Panel or wall mounting options.	24"	1/2"	20"	.75
	aner or wan mounting options.	24"	1/2"	24"	1
		30"	1/2"	14"	.66
		30"	1/2"	16"	.66
		30"	1/2"	18"	.66
		30"	1/2"	20"	.75
		30"	1/2"	24"	1
		36"	1/2"	14"	.66
		36"	1/2"	16"	.66
		36"	1/2"	18"	.66
		36"	1/2"	20"	.75
		36"	1/2"	24"	1
		42"	1/2"	14"	.66
		42"	1/2"	16"	.66
		42"	1/2"	18"	.66
		42"	1/2"	20"	.75
		42"	1/2"	24"	1
		48"	1/2"	14"	.66
		48"	1/2"	16"	.66
		48"	1/2"	18"	.66
		48"	1/2"	20"	.75
		48"	1/2"	24"	1
		60"	1/2"	14"	.66
		60"	1/2"	16"	.66
		60"	1/2"	18"	.66
		60"	1/2"	20"	.75
		60"	1/2"	24"	1

pattern no.	10	COM 15	20	30	35	40	45/46	50	55	60
F-24-14-( )-A-( )( )( )	\$302.	\$311.	\$346.	\$359.	\$363.	\$370.	\$382.	\$383.	\$405.	\$418.
F-24-16-( )-A-( )( )( )	302.	311.	346.	359.	363.	370.	382.	383.	405.	418.
F-24-18-( )-A-( )( )( )	324.	332.	357.	371.	373.	378.	391.	394.	414.	429.
F-24-20-( )-A-( )( )( )	405.	409.	415.	432.	435.	441.	455.	458.	481.	495.
F-24-24-( )-A-( )( )( )	454.	462.	510.	530.	535.	542.	563.	566.	598.	620.
F-30-14-( )-A-( )( )( )	345.	351.	400.	410.	414.	419.	434.	435.	455.	468.
F-30-16-( )-A-( )( )( )	355.	361.	408.	419.	422.	432.	443.	445.	466.	480.
F-30-18-( )-A-( )( )( )	367.	372.	418.	433.	435.	441.	454.	455.	476.	491.
F-30-20-( )-A-( )( )( )	457.	463.	499.	511.	517.	525.	537.	538.	563.	580.
F-30-24-( )-A-( )( )( )	509.	520.	552.	572.	576.	586.	606.	607.	639.	660.
F-36-14-( )-A-( )( )( )	355.	361.	418.	433.	435.	441.	454.	455.	476.	491.
F-36-16-( )-A-( )( )( )	374.	382.	432.	441.	445.	451.	462.	463.	487.	501.
F-36-18-( )-A-( )( )( )	385.	393.	439.	452.	455.	461.	475.	476.	494.	510.
F-36-20-( )-A-( )( )( )	457.	463.	508.	524.	527.	532.	547.	549.	573.	588.
F-36-24-( )-A-( )( )( )	537.	547.	615.	633.	638.	647.	665.	667.	700.	723.
F-42-14-( )-A-( )( )( )	377.	383.	451.	462.	466.	472.	486.	487.	507.	521.
F-42-16-( )-A-( )( )( )	407.	413.	458.	469.	475.	478.	491.	493.	513.	528.
F-42-18-( )-A-( )( )( )	407.	413.	481.	492.	494.	502.	513.	518.	537.	551.
F-42-20-( )-A-( )( )( )	520.	526.	570.	583.	587.	597.	610.	611.	634.	652.
F-42-24-( )-A-( )( )( )	631.	642.	699.	719.	723.	730.	752.	753.	785.	805.
F-48-14-( )-A-( )( )( )	385.	393.	460.	472.	476.	481.	493.	494.	518.	531.
F-48-16-( )-A-( )( )( )	407.	413.	481.	492.	494.	502.	513.	518.	537.	551.
F-48-18-( )-A-( )( )( )	416.	422.	481.	492.	494.	502.	513.	518.	537.	551.
F-48-20-( )-A-( )( )( )	520.	526.	570.	583.	587.	597.	610.	611.	634.	652.
F-48-24-( )-A-( )( )( )	644.	652.	800.	820.	824.	831.	852.	854.	886.	907.
F-60-14-( )-A-( )( )( )	489.	494.	582.	597.	599.	606.	618.	n/a	n/a	n/a
F-60-16-( )-A-( )( )( )	501.	506.	596.	607.	610.	616.	628.	n/a	n/a	n/a
F-60-18-( )-A-( )( )( )	530.	536.	608.	621.	623.	629.	644.	n/a	n/a	n/a
F-60-20-( )-A-( )( )( )	567.	575.	633.	647.	650.	657.	669.	n/a	n/a	n/a
F-60-24-( )-A-( )( )( )	644.	652.	800.	820.	824.	831.	852.	n/a	n/a	n/a

Example:	F-24-16-R2-A-30- W388/1 F-WM-F
F-24-16	24" x 16" Fabric board
R2	Rounded corner/radius edge detail
A	Thickness
30	Fabric grade 30
W388/1	Freehand, Glacier
F-WM-F	Wall-mounted, flush

#### **Ordering Information**

- Specify: 1. Pattern number
- 2. Corner/edge detail
- 3. Thickness
- 4. Fabric grade
- 5. Fabric selection
- 6. Mounting option pattern number 7. System suffix (panel-mounted
- option only)

Corner/edge detail: Squared corner/rectilinear edge (S1)

Squared corner/radiused edge (S2) Rounded corner/radiused edge (R2)

Standard fabric board has squared corner and rectilinear edge details. See page 164 for edge upcharge.

Standard fabric board has 1/2" thick mineral board.

 $Panel-mounted\ brackets:$ Panel-mounted brackets are included in the list price but must be specified separately. To specify appropriate panel-mounted bracket, consult the KnollExtra Bracket Chart on page 12.

**Mounting Options** 

Panel mounted bracket size must match height of fabric board.

Wall-mounted options: Wall-mounted applications must be specified as flush (F-WM-F) or reveal (F-WM-R). Both options are appropriate for any smooth, clean surface. Flush wall-mount option utilizes velcro squares.

Reveal wall-mount option provides 1/2" clearance for wire management behind fabric board. Fabric boards mount with 4 brackets onto 2 black painted wall rails that screw into wall to ensure rigidity. For other mounting options and pricing, contact Customer Service.

Under overhead specification note: For application under a system overhead, provide clearance distance between the worksurface and the bottom of the overhead or task light.

Side by side fabric board specification note: Please note if a panel-mounted fabric board will be used contiguous to another fabric board, drawings are required and there will be an up-charge.

60" wide boards in fabric grades 50, 55 and 60: Due to grades 50, 55 and 60 fabric widths being less then the width of a 60" board, contact your KnollExtra representative or Customer Service for pricing and fabric railroading information.

#### **Custom Options**

For special sizes: For specials contact Customer Service. Maximum fabric board size is 120"W x 24"H. Fabric must be railroaded on any panel wider than 60".

Customer's own material: For approval, submit at least one yard of fabric for application testing. For panel-mounted applications, all COMs and textiles that are not pre-approved must be UL-tested. Please consult Knoll sales Customer Services for details.

### Construction

1/2" thick mineral board for durable, highly tackable surface.

Manufactured in the United States.

### **Fabric Selection**

Grade 20 (cont.)

Mainframe

Nematic II

Photon II

Resolution

Weave Three

Basket Draft

Match Point

Reflect

 ${\it Grade~30}$ 

Flow

Harmony

Micro

 $Grade\ 10$ Annex Beacon Broadcloth II Circuit Element

Foundation Growth Spurt Pivot Skylark

Symbolic Details Tailor  $\mathrm{Made\ II}**$ Twister Versatility

Block

Logic

Circle Line

Criss Cross

Relay Grade~20Bauhaus

Amplify Bandwidth Foil Rap Glisten\* Hard Rock Heavy Metal Ornament Palladium Hourglass Spellbound \*

 $Grade\ 40$ 

Grade 45 Backdrop† Dristi \*

Abacus \* Chance \* Chroma \*‡ Knoll Hopsack \* Mariner \*‡ Prague \* Presto \*

Grade 50

Stepping

Stones \*±

Trophy \*

Wide Angle \*

Grade 60 Classic Boucle \*‡

Grade 55

Bistro \*

Cavalier \*‡

Knoll Felt \*

Transition \*

Ransom \*

Tryst \*

- † Not available with radiused edge.
- \* Consult your Knoll sales representative or Customer Service for pricing on 60" wide boards.

 $Grade\ A$ 

Trophy \*

 ${\it Grade}~B$ 

Versa \*

- ‡ Available for wall mount only. \* \*Taylor Made II colors #1, 2A,3,5 and
- 8 do not qualify.

Note:

As a general rule, all fabrics approved for a Morrison panel application are approved for KnollExtra fabric wrapped tack boards.

## Universal Fabric Boards Options and Mounting Information

product	description	application	W	d	h
Fabric Boards	Mounting Options	1/2" Reveal Wall-Mounted Flush Wall-Mounted (No charge when ordered with fabric board)			
		Panel-Mounted Dividends (No charge when ordered wifabric board)	th		
		Panel-Mounted Morrison (N charge when ordered with fabric board)	0		
		Panel-Mounted Reff (No charge when ordered with fabric board)			
	Edge Detail	Rounded corner/radiused edge (add -R2 to end of fabr board pattern number)	ic		
		Squared corner/radiused ed (add -S2 to end of fabric board pattern number)	ge		
		Squared corner/rectilinear edge (add -S1 to end of fabri board pattern number)	c		

pattern no.	list price
F-WM-R-(14, 16, 18, 20 or 24)	\$121
F-WM-F-(24, 30, 36, 42, 48, 60)- (14, 16, 18, 20 or 24)	38
F-PM-D-(14, 16, 18, 20 or 24)	47
F-PM-M-(14, 16, 18, 20 or 24)	47
F-PM-R-(14, 16, 18, 20 or 24)	47
R2	39
S2	39
S1	n/e

Order Cod	de	Ordering Information		<b>Mounting Options</b>
Example:	F-60-14-S1-A-40- W337/4 F-PM-R-14	Specify:  1. Pattern number 2. Corner/edge detail 3. Fabric grade 4. Fabric selection 5. Mounting option pattern number 6. System suffix (panel-mounted option only)  Corner/edge detail: Squared corner/rectilinear edge (S1)  Squared corner/radiused edge (S2)  Rounded corner/radiused edge (R2)	Standard fabric board has squared corner and rectilinear edge details. See above for edge upcharge.	Panel-mounted brackets: Panel-mounted brackets are included in the list price but must be specified separately. To specify appropriate panel-mounted bracket, consult the Knoll sales bracket chart on page 12.
F-60-14 S1	60" x 14" fabric board Squared corner/rectilinear edge		Thickness option: Standard fabric board has 1/2" thick mineral board.	
A 40	Thickness Fabric grade			Panel mounted bracket size must match height of fabric board.
W337/4 F-PM R 14	Sennit, Olivine Panel-mounted Reff 14" Fabric board bracket			Wall-mounted options: Wall-mounted applications must be specified as flush (F-WM-F) or reveal (F-WM-R). Both options are appropriate for any smooth, clean surface.
				Flush wall-mount option utilizes velcro squares.

Under overhead specification note:
For application under a system
overhead, provide clearance
distance between the worksurface
and the bottom of the overhead or task light.

Side by side fabric board specification note: Please note if a panel-mounted fabric board will be used contiguous to another fabric board drawings are required and there will be an up-charge.

#### Construction

 $^{1}\!/\!_{2}^{\prime\prime}$  thick mineral board for durable, highly tackable surface.

#### **Custom Options**

For special sizes: For specials contact Customer Service. Maximum fabric board size is 120"W x 24"H. Fabric must be railroaded on any panel wider than

Customer's own material:
For approval, submit at least one yard of fabric for application testing. For panel-mounted applications, all COMs and textiles that are not pre-approved must be UL-tested. Please consult Knoll sales Customer Service for details. Service for details.

## S1. Squared corner/Rectilinear edge

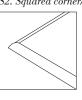
Corner/Edge Detail

S2. Squared corner/Radiused edge





R2. Rounded corner/Radiused edge



## Scribe<sup>TM</sup> Mobile Markerboards by Antenna Design

description

Mobile Markerboard



30" x 54" mobile whiteboard	
36" x 54" mobile whiteboard	
42" x 54" mobile whiteboard	
48" x 54" mobile whiteboard	

Markers	Set of 4 markers
Markerboard Cleaning Cloth	40 x 30 cm microfiber cloth
Paper Pad Mount	Set of 2 hooks

pattern no.	list price
ACT-CB-M-LW-30-54-X	\$1,490.
ACT-CB-M-LW-36-54-X	1,553.
ACT-CB-M-LW-42-54-X	1,615.
ACT-CB-M-LW-48-54-X	1,678.

ACT-CB-M-MARKER	27.
ACT-CB-M-CLOTH	15.
ACT-CB-M-FLIPHOOK	84.

#### **Specification Information Application Notes**

Example:	ACT-CB-M-LW-30-54-X- 111
ACT	Activity Spaces
СВ	Communication Boards
M	Mobile
LW	Laminate Whiteboard
30-54	30" x 54" board
A	One cup and one tray
111	Jet Black finish

Order Code

<ol> <li>Pattern number</li> <li>Marker tray</li> <li>Frame finish</li> </ol>	Marker storage options (trays and cups) must be ordered with markerboard and are not
Finish options: Select one of the following finishes	retrofittable in the field. Replace -> in pattern with :
Code: Description 111 Jet Black 115 Medium Grey 118 Bright White 130 Dark Red 131 Slate Blue Note: Frame finish applies to cross members and legs, as well as any marker trays and cups. Paint is textured power coat.	Code:         Upchg.         Desc.           S         \$79         One tray           D         \$158         Two trays           C         \$57         One cup           E         \$114         Two cups           A         \$136         One cup and one trace           B         \$215         One cup and two trace           F         \$193         Two cups and one trace           G         \$272         Two cups and two trace

Specify:

## Marker storage options

ust be ordered with board and are not able in the field. Replace -X rn with: Upchg. Desc. \$79 One tray \$158 Two trays \$57 One cup \$114 Two cups \$136 One cup and one tray \$215 One cup and two trays \$193 Two cups and one tray \$272 Two cups and two trays

#### Construction

Whiteboard: Honeycomb core with medium-density fiberboard skin, high pressure laminate finish and ABS edge.

Crossmember: Aluminum

Legs: Steel

Cup: Die cast aluminum with wool felt insert and steel fasteners.

Each markerboard ships with four dry erase markers (blue, green, red and black) and a microfiber cleaning cloth.

Overall height from floor is 72' high with writable surface starting 25" from floor.

The optional marker tray runs the optional marker cup mounts to the side.

To prevent dry erase markers from drying out, store them with the cap down in the optional cup.

# Alpha-Numeric Index

pattern no.	page
001-214	40
001-315	40
012-1	38
012-2	38
012-3	38
012-4	38
050	34
055-BO	34
1901	32
1901-2	32
1905	32
1906	32
1912-20	38
1912-30	38
1912-40	38
1915	32
1916	32
2ORCH-F-LT	44
2ORCH-S-LGT	46
2ORCH-S-LT	44
3301	36
3305	36
3313	38
3315	36
3319-4	36
3319-4-LN	36
3650	36
512-20	38
ACT-CB-M-CLOTH	28, 168
ACT-CB-M-FLIPHOOK	168
ACT-CB-M-LW-30-54-X	168
ACT-CB-M-LW-36-54-X	168
ACT-CB-M-LW-42-54-X	168
ACT-CB-M-LW-48-54-X	168
ACT-CB-M-MARKER	28, 168
ACT-CUP-MG	28, 42
ACT-PW-PC-24-24-13-1C	28
ACT-PW-PC-24-24-13-1CUSB	28
ACT-PW-PC-24-24-13-1E	28
ACT-PW-PC-24-24-13-1EUSB	28
ACT-PW-PC-24-24-13-2E	28
ACT-PW-PC-24-24-13-2EUSB	28
ACT-PW-PC-24-24-13-X	28
ACT-PW-PC-36-36-13-1C	28
ACT-PW-PC-36-36-13-1CUSB	28
ACT-PW-PC-36-36-13-1E	28
ACT-PW-PC-36-36-13-1EUSB	28
ACT-PW-PC-36-36-13-2E	28
ACT-PW-PC-36-36-13-2EUSB	28
ACT-PW-PC-36-36-13-X	28
ACT-PW-TAB-9-EL	30
BP-L	160
BP-PD	160
COPE-01	26
COPE-01-BASE	26
COPE-02	26
COPE-02-BASE	26
COPEBULB	26
COPE-CLMP	26
COPE-SLT	26
COI E-SLI	
F-24-14	164

pattern no.	page
F-24-16	164
F-24-18	164
F-24-20	164
F-24-24	164
F-30-14	164
F-30-16	164
F-30-18	164
F-30-20	164
F-30-24	164
F-36-14	164
F-36-16	164
F-36-18	164
F-36-20	164
F-36-24	164
F-42-14	164
F-42-16	164
F-42-18	164
F-42-20 F-42-24	164
F-48-14	164
F-48-16	164
F-48-18	164
F-48-20	164
F-48-24	164
F-60-14	164
F-60-16	164
F-60-18	164
F-60-20	164
F-60-24	164
F-PM-D-(14, 16, 18, 20 or 24)	166
F-PM-M-(14, 16, 18, 20 or 24)	166
F-PM-R-(14, 16, 18, 20 or 24)	166
F-WM-F-(24, 30, 36, 42, 48, 60) 20 or 24)	)- (14, 16, 18, 166
F-WM-R-(14, 16, 18, 20 or 24)	166
LED 1 S BASE	14
LED 1 S BASE I	20
LED 1 S CLMP	14
LED 1 S CLMP I	20
LED 1 S PCLMP	14
LED 1 S PCLMP I	20
LED 1 S SIDE	14
LED 1 S SIDE I	20
LED 2 AD 19	16, 22
LED 2 AD 37	16, 22
LED 2 AD 67	16
LED 2 IN 19	16
LED 2 IN 19 I	22
LED 2 IN 37	16
LED 2 IN 37 I	22
LED 2 IN 67	16
LED 2 IN 79	16
LED 3 13 BLK	18
LED 3 13 BLK I	24
LED 3 21 BLK	18
LED 3 21 BLK I	24
LED PIR OA CPU2 MTI	14, 16, 20, 22
OA-CPU2-MTL	158
OA-CPU2-SLNG OAK-21-AL-BK-(16,18,22,23,25	158
OAK-21-AL-BK-PT-(16,18,22,23,25	
21 ALI DIS-1 1-(10,10,22,20	,=0) 104

pattern no.	page
OAK-21HP-AL-BK-(16,18,22,23,25)	154
OAK-21HP-AL-BK-PT-(16,18,22,23,25)	154
OAK-21HP-SL-BK-(16,18,22)	154
OAK-21HP-SS-BK-(16,18,22,23,25)	154
OAK-21HP-SS-BK-PT-(16,18,22,23,25)	154
OAK-21-SL-BK-(16,18,22)	154
OAK-21-SS-BK-(16,18,22,23,25)	154
OAK-21-SS-BK-PT-(16,18,22,23,25)	154
OAK-27-AL-BK-(16,18,22,23,25)	154
OAK-27-AL-BK-PT-(16,18,22,23,25)	154
OAK-27-SL-BK-(16,18,22)	154
OAK-27-SS-BK-(16,18,22,23,25)	154
OAK-27-SS-BK-PT-(16,18,22,23,25)	154
OA-SLV(A,B,C)-(E, J)	156
OA-SLV(A,B,C)-(GS, BS)	156
OR-BKT-PM-B	58
OR-BKT-PM-CE	58
OR-BKT-PM-CS	58
OR-BKT-PM-D	58
OR-BKT-PM-DS	58
OR-BKT-PM-DV	58
OR-BKT-PM-M	58
OR-BKT-PM-R	- 58
OR-BKT-SM-A OR-BKT-WM	58 58
ORCH-BDN	48
ORCH-DP	52
ORCH-F-LT	44
ORCH-FS	48
ORCH-HFH	50
ORCH-MT	50
ORCH-PC	50
ORCH-PD-A	160
ORCH-SB	46
ORCH-S-LGT	44
ORCH-S-LT	44
ORCH-SSD	48
ORCH-TD	50
ORCH-TS-UNI	52
ORCH-UT	50
ORCH-VAS	52
ORCH-VPP	48
ORCH-WBK	52
ORCH-WBK-R-EB	52
OR-LBI-24-N2-( )( )	54
OR-LBI-24-( )( )	54
OR-LBI-30-N2-( )( )	54
OR-LBI-30-( )( )	54
OR-LBI-35-( )( )	54
OR-LBI-36-DV-( )( )	54
OR-LBI-36-N2-( )( )	54
OR-LBI-36-( )( )	54
OR-LBI-42-DV-( )( )	54
OR-LBI-42-N2-( )( )	54
OR-LBI-42-()()	54
OR-LBI-45-()()	54
OR-LBI-48-DV-( )( )	54
OR-LBI-48-N2-( )( )	54
OR-LBI-48-()()	54
OR-LBI-54-N2-( )( )	54
OR-LBI-54-()()	54

pattern no.	page
OR-LBI-60-DV-( )( )	54
OR-LBI-60-N2-( )( )	54
OR-LBI-60-( )( )	54
OR-LBI-66-N2-( )( )	54
OR-LBI-66-( )( )	54
OR-LBI-72-DV-()()	54
OR-LBI-72-N2-( )( )	54
OR-LBI-72-( )( ) OR-SL-06-24-N2-( )( )	54 56
OR-SL-06-24-()()	56
OR-SL-06-30-N2-( )( )	56
OR-SL-06-30-( )( )	56
OR-SL-06-35-( )( )	56
OR-SL-06-36-N2-( )( )	56
OR-SL-06-36-( )( )	56
OR-SL-06-42-N2-( )( )	56
OR-SL-06-42-( )( )	56
OR-SL-06-45-( )( )	56
OR-SL-06-48-N2-( )( )	56
OR-SL-06-48-( )( )	56
OR-SL-06-54-N2-( )( )	56
OR-SL-06-54-( )( )	56
OR-SL-06-60-N2-( )( )	56
OR-SL-06-60-()()	56
OR-SL-06-66-N2-( )( )	56
OR-SL-06-66-()() OR-SL-06-72-N2-()()	56 56
OR-SL-06-72-()()	56
OR-SL-14-24-()()	56
OR-SL-14-30-()()	56
OR-SL-14-35-()()	56
OR-SL-14-36-()()	56
OR-SL-14-42-()()	56
OR-SL-14-45-( )( )	56
OR-SL-14-48-( )( )	56
OR-SL-14-54-( )( )	56
OR-SL-14-60-( )( )	56
OR-SL-14-66-( )( )	56
OR-SL-14-72-( )( )	56
OR-WB-24-18	162
OR-WB-30-18	162
OR-WB-30-24	162
OR-WB-36-18	162
OR-WB-36-24	162
OR-WB-42-24 OR-WB-42-30	162
OR-WB-48-30	162
OR-WB-LBZ	162
OR-WB-PM-B	162
OR-WB-PM-D	162
OR-WB-PM-DV	162
OR-WB-PM-M	162
OR-WB-PM-R	162
OR-WB-TCM-DV	162
OR-WB-TCM-M	162
OR-WB-TCM-R	162
OR-WB-TR	162
OR-WB-WM	162
R2	166
51	166
52	166

SAP 3 BKT         108           SAP 4 BKT         108           SAP 50 B 16 M 3 ANT SIDE K         94           SAP 50 B 16 M 3 ANT SIDE K         98           SAP 50 B 16 M 4 ANT SIDE K         98           SAP 50 B 16 S 3 ANT SIDE K         94           SAP 50 B 16 S 3 ANT SIDE K         94           SAP 50 B 16 S 3 ANT SIDE K         98           SAP 50 B 16 S 4 CLMP HD K         96           SAP 50 B 16 S 4 CLMP HD K         96           SAP 50 B 24 M 3 ANT SIDE K         94           SAP 50 B 24 M 3 ANT SIDE K         94           SAP 50 B 24 M 3 ANT SIDE K         98           SAP 50 B 24 M 4 ANT SIDE K         98           SAP 50 B 24 M 5 ANT SIDE K         98           SAP 50 B 24 M 5 ANT SIDE K         98           SAP 50 B 24 S 3 ANT SIDE K         98           SAP 50 B 24 S 4 ANT SIDE K         98           SAP 50 B 24 S 4 ANT SIDE K         98           SAP 50 B 24 S 4 CLMP HD K         96           SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100	pattern no.	page
SAP 50 B 16 M 3 ANT SIDE K SAP 50 B 16 M 3 CLMP HD K SAP 50 B 16 M 4 ANT SIDE K SAP 50 B 16 M 4 CLMP HD K SAP 50 B 16 M 4 CLMP HD K SAP 50 B 16 S 3 ANT SIDE K SAP 50 B 16 S 3 ANT SIDE K SAP 50 B 16 S 3 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 4 S 4 CLMP HD K SAP 50 B 24 S 4 S 4 CLMP HD K SAP 50 B 24 S 5 CLMP HD K SAP 50 B 24 S 6 CLMP HD K SAP 50 B 24 S 6 CLMP HD K SAP 50 B 24 S 7 CLMP HD K SAP 50 B 24 S 8 CLMP HD K SAP 50 B 24 S 8 CLMP HD K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SA	SAP 3 BKT	108
SAP 50 B 16 M 4 ANT SIDE K SAP 50 B 16 M 4 ANT SIDE K SAP 50 B 16 M 4 CLMP HD K SAP 50 B 16 S 3 ANT SIDE K SAP 50 B 16 S 3 ANT SIDE K SAP 50 B 16 S 3 CLMP HD K SAP 50 B 16 S 3 CLMP HD K SAP 50 B 16 S 4 ANT SIDE K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 4 ANT SIDE K SAP 50 B 24 S 5 CLMP HD K SAP 50 B 24 S 6 CLMP HD K SAP 50 B 24 S 6 CLMP HD K SAP 50 B 24 S 6 CLMP HD K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP	SAP 4 BKT	108
SAP 50 B 16 M 4 ANT SIDE K SAP 50 B 16 M 4 CLMP HD K SAP 50 B 16 S 3 ANT SIDE K SAP 50 B 16 S 3 ANT SIDE K SAP 50 B 16 S 3 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 5 CLMP HD K SAP 50 B 24 S 6 ANT SIDE K SAP 50 B 24 S 6 CLMP HD K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 8 ANT SIDE K SAP B 16 M 3 ANT SIDE K SAP B 16 M 3 ANT SIDE K SAP B 16 M 3 ANT SIDE K SAP B 16 M 4 CLMP HD K SAP B 16 S 3 CLMP HD K SAP B 16 S 3 CLMP HD K SAP B 16 S 4 CLMP HD K SAP B 16 S 4 CLMP HD K SAP B 16 S 4 CLMP HD K SAP B 16 S 3 ANT SIDE K SAP B 16 S 4 ANT SIDE K SAP B 16 S 4 ANT SIDE K SAP B 16 S 4 CLMP HD K SAP B 24 M 3 ANT SIDE K SAP B 16 S 3 ANT SIDE K SAP B 16 S 3 CLMP HD K SAP B 24 B 3 ANT SIDE K SAP B 32 S 6 CLMP HD K SAP B 32 S 6 ANT SIDE K SAP B 32 S 6 ANT SIDE K SAP B 32 S 8 ANT SIDE K SAP B 32 S 8 ANT SIDE K SAP B 32 S 8 CLMP HD K SAP B 32 S 8 CLMP HD K SAP B 32 S 8 CLMP HD K SAP B		94
SAP 50 B 16 M 4 CLMP HD K 96 SAP 50 B 16 S 3 ANT SIDE K 94 SAP 50 B 16 S 3 CLMP HD K 92 SAP 50 B 16 S 4 CLMP HD K 96 SAP 50 B 16 S 4 CLMP HD K 96 SAP 50 B 16 S 4 CLMP HD K 96 SAP 50 B 24 M 3 ANT SIDE K 98 SAP 50 B 24 M 3 ANT SIDE K 98 SAP 50 B 24 M 4 ANT SIDE K 98 SAP 50 B 24 M 4 CLMP HD K 96 SAP 50 B 24 S 3 ANT SIDE K 98 SAP 50 B 24 S 3 ANT SIDE K 98 SAP 50 B 24 S 4 CLMP HD K 99 SAP 50 B 24 S 5 CLMP HD K 90 SAP 50 B 24 S 6 CLMP HD K 90 SAP 50 B 24 S 6 CLMP HD K 91 SAP 50 B 32 S 8 CLMP HD K 92 SAP 50 B 32 S 8 CLMP HD K 94 SAP 50 B 32 S 8 CLMP HD K 96 SAP 50 B 32 S 8 CLMP HD K 97 SAP 50 B 32 S 8 CLMP HD K 98 SAP 50 B 32 S 8 CLMP HD K 99 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50		
SAP 50 B 16 S 3 ANT SIDE K 94 SAP 50 B 16 S 3 CLMP HD K 92 SAP 50 B 16 S 4 ANT SIDE K 98 SAP 50 B 16 S 4 CLMP HD K 96 SAP 50 B 16 S 4 CLMP HD K 96 SAP 50 B 24 M 3 ANT SIDE K 98 SAP 50 B 24 M 3 ANT SIDE K 98 SAP 50 B 24 M 4 CLMP HD K 99 SAP 50 B 24 M 4 CLMP HD K 96 SAP 50 B 24 M 4 CLMP HD K 96 SAP 50 B 24 S 3 ANT SIDE K 98 SAP 50 B 24 S 4 CLMP HD K 99 SAP 50 B 24 S 4 CLMP HD K 90 SAP 50 B 32 M 6 ANT SIDE K 91 SAP 50 B 32 M 8 ANT SIDE K 92 SAP 50 B 32 M 8 ANT SIDE K 93 SAP 50 B 32 M 8 ANT SIDE K 94 SAP 50 B 32 M 8 ANT SIDE K 96 SAP 50 B 32 M 8 ANT SIDE K 97 SAP 50 B 32 M 8 ANT SIDE K 98 SAP 50 B 32 M 8 ANT SIDE K 99 SAP 50 B 32 M 8 ANT SIDE K 90 SAP 50 B 32 M 8 ANT SIDE K 90 SAP 50 B 32 M 8 ANT SIDE K 90 SAP 50 B 32 M 8 ANT SIDE K 90 SAP 50 B 32 S 6 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 32 S 8 CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 B 30 S S S CLMP HD K 90 SAP 50 S SAP 50 S S S S CLMP HD K 90 SAP 50 S S S S S S S S S S S S S S S S S S		
SAP 50 B 16 S 3 CLMP HD K SAP 50 B 16 S 4 ANT SIDE K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 16 S 4 CLMP HD K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 4 ANT SIDE K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 3 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 32 M 6 ANT SIDE K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 8 ANT SIDE K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 S CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 S CLMP HD K SAP		
SAP 50 B 16 S 4 ANT SIDE K         98           SAP 50 B 16 S 4 CLMP HD K         96           SAP 50 B 24 M 3 ANT SIDE K         94           SAP 50 B 24 M 3 CLMP HD K         92           SAP 50 B 24 M 4 ANT SIDE K         98           SAP 50 B 24 M 4 CLMP HD K         96           SAP 50 B 24 S 3 ANT SIDE K         94           SAP 50 B 24 S 3 CLMP HD K         92           SAP 50 B 24 S 4 ANT SIDE K         98           SAP 50 B 32 M 6 ANT SIDE K         98           SAP 50 B 32 M 6 ANT SIDE K         102           SAP 50 B 32 M 8 ANT SIDE K         106           SAP 50 B 32 M 8 CLMP HD K         106           SAP 50 B 32 S 6 ANT SIDE K         106           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         92           SAP B 16 M 3 ANT SIDE K		
SAP 50 B 16 S 4 CLMP HD K SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 32 M 6 ANT SIDE K SAP 50 B 32 M 6 ANT SIDE K SAP 50 B 32 M 8 ANT SIDE K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 6 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 8 16 M 3 ANT SIDE K SAP 8 16 M 3 ANT SIDE K SAP B 16 M 4 ANT SIDE K SAP B 16 M 4 ANT SIDE K SAP B 16 S 3 CLMP HD K SAP B 16 S 3 CLMP HD K SAP B 16 S 3 CLMP HD K SAP B 16 S 4 ANT SIDE K SAP B 16 S 4 CLMP HD K SAP B 16 S 4 CLMP HD K SAP B 24 M 3 ANT SIDE K SAP B 24 M 3 CLMP HD K SAP B 24 M 3 CLMP HD K SAP B 24 M 3 CLMP HD K SAP B 24 S 3 ANT SIDE K SAP B 24 M 3 CLMP HD K SAP B 24 S 3 CLMP HD K SAP B 32 M 6 CLMP HD K SAP B 32 S 6 CLMP H		
SAP 50 B 24 M 3 ANT SIDE K SAP 50 B 24 M 3 CLMP HD K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 M 4 ANT SIDE K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 M 4 CLMP HD K SAP 50 B 24 S 3 CLMP HD K SAP 50 B 24 S 3 CLMP HD K SAP 50 B 24 S 4 ANT SIDE K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 32 M 6 ANT SIDE K SAP 50 B 32 M 6 ANT SIDE K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 8 ANT SIDE K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 WL DIR SAP ANT SIDE SAP B 16 M 3 ANT SIDE K SAP 80 B 16 M 3 CLMP HD K SAP 81 66 M 4 CLMP HD K SAP 81 66 M 3 CLMP HD K SAP 81 66 M 3 CLMP HD K SAP 81 66 M 4 CLMP HD K SAP 81 66 M 3 CLMP HD K SAP 81 66 M 3 CLMP HD K SAP 81 66 M 4 CLMP HD K SAP 81 66 S 3 CLMP HD K SAP 81 66 S		
SAP 50 B 24 M 3 CLMP HD K 92 SAP 50 B 24 M 4 ANT SIDE K 98 SAP 50 B 24 M 4 CLMP HD K 96 SAP 50 B 24 S 3 ANT SIDE K 94 SAP 50 B 24 S 3 CLMP HD K 92 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 32 M 6 ANT SIDE K 100 SAP 50 B 32 M 6 CLMP HD K 100 SAP 50 B 32 M 8 ANT SIDE K 102 SAP 50 B 32 M 8 CLMP HD K 100 SAP 50 B 32 M 8 CLMP HD K 100 SAP 50 B 32 S 6 ANT SIDE K 102 SAP 50 B 32 S 8 ANT SIDE K 106 SAP 50 B 32 S 8 CLMP HD K 100 SAP 8 16 M 3 ANT SIDE K 100 SAP 8 16 M 3 CLMP HD K 100 SAP 8 16 M 4 CLMP HD K 100 SAP 8 16 S 3 CLMP HD K 100 SAP 8 16 S 3 CLMP HD K 100 SAP 8 16 S 3 CLMP HD K 100 SAP 8 16 S 3 CLMP HD K 100 SAP 8 16 S 4 CLMP HD K 100 SAP 8 16 S 4 CLMP HD K 100 SAP 8 16 S 4 CLMP HD K 100 SAP 8 16 S 4 CLMP HD K 100 SAP 8 16 S 4 CLMP HD K 100 SAP 8 16 S 4 CLMP HD K 100 SAP 8 14 M 4 ANT SIDE K 100 SAP 8 14 M 4 CLMP HD K 100 SAP 8 14 M 4 CLMP HD K 100 SAP 8 14 S 4 CLMP HD K 100 SAP 8 14 S 4 CLMP HD K 100 SAP 8 14 S 4 CLMP HD K 100 SAP 8 14 S 4 CLMP HD K 100 SAP 8 15 S 6 ANT SIDE K 100 SAP 8 15 S 116 SAP 8 16 S 100 SAP 8 16		
SAP 50 B 24 M 4 CLMP HD K 96 SAP 50 B 24 S 3 ANT SIDE K 94 SAP 50 B 24 S 3 CLMP HD K 92 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 24 S 4 CLMP HD K 96 SAP 50 B 32 M 6 ANT SIDE K 100 SAP 50 B 32 M 6 CLMP HD K 100 SAP 50 B 32 M 8 ANT SIDE K 106 SAP 50 B 32 M 8 CLMP HD K 100 SAP 50 B 32 M 8 CLMP HD K 100 SAP 50 B 32 S 6 ANT SIDE K 102 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 WL DIR 126 SAP 50 WL DIR 126 SAP 80 B 6 M 3 ANT SIDE K 100 SAP 80 B 6 M 3 CLMP HD K 100 SAP 80 B 6 M 3 CLMP HD K 100 SAP 80 B 6 M 3 CLMP HD K 100 SAP 80 B 6 M 4 CLMP HD K 100 SAP 80 B 6 M 4 CLMP HD K 100 SAP 80 B 6 M 4 CLMP HD K 100 SAP 80 B 6 M 4 CLMP HD K 100 SAP 80 B 6 S 3 CLMP HD K 100 SAP 80 B 6 S 3 CLMP HD K 100 SAP 80 B 6 S 3 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 4 CLMP HD K 100 SAP 80 B 6 S 6 ANT SIDE K 100 SAP 80 B 6 S 6 ANT SIDE K 100 SAP 80 B 6 S 6 ANT SIDE K 100 SAP 80 B 6 S 6 ANT SIDE K 100 SAP 80 B 6 S 6 CLMP HD K 100 SAP 80 B 6 S 6 CLMP HD K 100 SAP 80 B 6 S 6 CLMP HD K 100 SAP 80 S 80		
SAP 50 B 24 S 3 ANT SIDE K SAP 50 B 24 S 3 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 32 M 6 ANT SIDE K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 6 CLMP HD K SAP 50 B 32 M 8 ANT SIDE K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 M 8 CLMP HD K SAP 50 B 32 S 6 ANT SIDE K SAP 50 B 32 S 8 ANT SIDE K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 B 32 S 8 CLMP HD K SAP 50 WL DIR SAP 50 WL DIR SAP 50 WL DIR SAP ANT SIDE SAP B 16 M 3 ANT SIDE K SAP B 16 M 3 ANT SIDE K SAP B 16 M 4 CLMP HD K SAP 50 B 16 M 4 CLMP HD K SAP 50 B 16 S 3 CLMP HD K SAP B 16 S 4 CLMP HD K SAP B 16 S 3 CLMP HD K SAP B 16 S 4 CLMP HD K SAP B 24 M 3 CLMP HD K SAP B 24 M 3 CLMP HD K SAP B 24 M 3 CLMP HD K SAP B 24 M 4 CLMP HD K SAP B 24 S 3 CLMP HD K SAP B 32 S 6 CL	SAP 50 B 24 M 4 ANT SIDE K	98
SAP 50 B 24 S 3 CLMP HD K         92           SAP 50 B 24 S 4 ANT SIDE K         98           SAP 50 B 24 S 4 CLMP HD K         96           SAP 50 B 32 M 6 ANT SIDE K         102           SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 M 8 ANT SIDE K         106           SAP 50 B 32 M 8 CLMP HD K         104           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 B 32 S 8 CLMP HD K         106           SAP 50 WL DIR         126           SAP 50 B MT         110           SAP 50 B BT         110           SAP ANT SIDE         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         96<	SAP 50 B 24 M 4 CLMP HD K	96
SAP 50 B 24 S 4 ANT SIDE K SAP 50 B 24 S 4 CLMP HD K SAP 50 B 32 M 6 ANT SIDE K 102 SAP 50 B 32 M 6 CLMP HD K 100 SAP 50 B 32 M 6 CLMP HD K 100 SAP 50 B 32 M 8 CLMP HD K 104 SAP 50 B 32 M 8 CLMP HD K 105 SAP 50 B 32 S 6 ANT SIDE K 106 SAP 50 B 32 S 6 CLMP HD K 107 SAP 50 B 32 S 8 CLMP HD K 108 SAP 50 B 32 S 8 CLMP HD K 109 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 B 32 S 8 CLMP HD K 100 SAP 50 WL DIR 126 SAP 50 WL DIR 127 SAP ANT SIDE 122 SAP ANT SIDE 122 SAP B 16 M 3 ANT SIDE K 108 SAP B 16 M 3 CLMP HD K 109 SAP B 16 M 4 CLMP HD K 109 SAP B 16 S 3 ANT SIDE K 109 SAP B 16 S 3 CLMP HD K 109 SAP B 16 S 4 CLMP HD K 109 SAP B 16 S 4 CLMP HD K 109 SAP B 16 S 4 CLMP HD K 109 SAP B 16 S 4 CLMP HD K 100 SAP B 24 M 3 ANT SIDE K 100 SAP B 24 M 3 CLMP HD K 100 SAP B 24 M 4 CLMP HD K 100 SAP B 24 S 3 ANT SIDE K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 4 CLMP HD K 100 SAP B 24 S 3 CLMP HD K 100 SAP B 24 S 4 CLMP HD K 100 SAP B 25 S 6 CLMP HD K 100 SAP B 26 CLMP HD K 100 SAP B 27 S 8 S 8 S 8 S 8 S 8 S 8 S 8 S 8 S 8 S	SAP 50 B 24 S 3 ANT SIDE K	94
SAP 50 B 24 S 4 CLMP HD K         96           SAP 50 B 32 M 6 ANT SIDE K         102           SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 M 8 ANT SIDE K         106           SAP 50 B 32 M 8 CLMP HD K         104           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 B 32 S 8 CLMP HD K         104           SAP 50 WL DIR         126           SAP 50 B WL DIR         126           SAP 50 B MT         110           SAP 50 B MT         110           SAP ANT SIDE         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         98           SAP B 24 M 3 ANT SIDE K         94	SAP 50 B 24 S 3 CLMP HD K	92
SAP 50 B 32 M 6 ANT SIDE K         102           SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 M 8 ANT SIDE K         106           SAP 50 B 32 M 8 CLMP HD K         104           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 WL DIR         126           SAP 50 D BKT         110           SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 3 CLMP HD K         92           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 5 ANT SIDE K         98           SAP B 16 S 3 CLMP HD K         96           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96	SAP 50 B 24 S 4 ANT SIDE K	98
SAP 50 B 32 M 6 CLMP HD K         100           SAP 50 B 32 M 8 ANT SIDE K         106           SAP 50 B 32 M 8 CLMP HD K         104           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 B 32 S 8 CLMP HD K         104           SAP 50 WL DIR         126           SAP 50D BKT         110           SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 3 CLMP HD K         92           SAP B 16 M 4 CLMP HD K         92           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         96           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96	SAP 50 B 24 S 4 CLMP HD K	96
SAP 50 B 32 M 8 ANT SIDE K         106           SAP 50 B 32 M 8 CLMP HD K         104           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 B 32 S 8 CLMP HD K         104           SAP 50 WL DIR         126           SAP 50 D BKT         110           SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S ANT SIDE K         94	SAP 50 B 32 M 6 ANT SIDE K	102
SAP 50 B 32 M 8 CLMP HD K         104           SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 B 32 S 8 CLMP HD K         104           SAP 50 WL DIR         126           SAP 50 WL DIR         126           SAP 50 WL DIR         126           SAP 50 WL DIR         122           SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 CLMP HD K         92           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S A ANT SIDE K         98           SAP B 16 S A CLMP HD K         92           SAP B 16 S A CLMP HD K         96           SAP B 24 M 3 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S ANT SIDE K         98		100
SAP 50 B 32 S 6 ANT SIDE K         102           SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 B 32 S 8 CLMP HD K         104           SAP 50 WL DIR         126           SAP 50 WL DIR         126           SAP 50 WL DIR         122           SAP 50 WL DIR         122           SAP SOUL DIR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 3 CLMP HD K         92           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 S 3 CLMP HD K         96           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S A ANT SIDE K         98           SAP B 16 S A CLMP HD K         92           SAP B 16 S A CLMP HD K         96           SAP B 24 M A CLMP HD K         96           SAP B 24 M A CLMP HD K         96           SAP B 24 M A CLMP HD K         96           SAP B 24 S ANT SIDE K         98           SAP B 24 S ANT SIDE K         98		106
SAP 50 B 32 S 6 CLMP HD K         100           SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 WL DIR         126           SAP 50 WL DIR         122           SAP ANT SIDE         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 CLMP HD K         92           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96           SAP B 24 M A CLMP HD K         96           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE		
SAP 50 B 32 S 8 ANT SIDE K         106           SAP 50 WL DIR         126           SAP 50 WL DIR         122           SAP SOULT SIDE K         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 S 3 CLMP HD K         96           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96           SAP B 24 M A ANT SIDE K         98           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         98           SAP B 32 M 6 ANT SIDE		
SAP 50 B 32 S 8 CLMP HD K  SAP 50 WL DIR  126  SAP 50 WL DIR  127  SAP ANT CTR  122  SAP ANT SIDE  122  SAP B 16 M 3 ANT SIDE K  SAP B 16 M 3 CLMP HD K  SAP B 16 M 4 CLMP HD K  SAP B 16 S 3 ANT SIDE K  SAP B 16 S 3 CLMP HD K  SAP B 16 S 3 CLMP HD K  SAP B 16 S 4 CLMP HD K  SAP B 24 M 3 CLMP HD K  SAP B 24 M 3 CLMP HD K  SAP B 24 M 4 CLMP HD K  SAP B 24 S 3 CLMP HD K  SAP B 24 S 4 CLMP HD K  SAP B 24 S 5 CLMP HD K  SAP B 25 SAP B 24 S 4 CLMP HD K  SAP B 24 S 5 CLMP HD K  SAP B 25 SAP B 26 CLMP HD K  SAP B 27 SAP		
SAP 50 WL DIR         126           SAP 50D BKT         110           SAP 50D BKT         110           SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 4 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 CLMP HD K         96           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         98           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         106           SAP B 32 M 8 ANT SIDE K         106           SAP		
SAP 50D BKT         110           SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 3 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         96           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         98           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 S 6 CLMP HD K         106 <t< td=""><td></td><td></td></t<>		
SAP ANT CTR         122           SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 CLMP HD K         96           SAP B 24 M 3 CLMP HD K         98           SAP B 24 S 3 CLMP HD K         96           SAP B 24 S 3 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         100           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 6 CLMP HD K         100		
SAP ANT SIDE         122           SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 4 CLMP HD K         92           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 4 CLMP HD K         92           SAP B 16 S 4 CLMP HD K         96           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 4 ANT SIDE K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         96           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         100           SAP B 32 M 7 SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 ANT SIDE K         106           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         10		
SAP B 16 M 3 ANT SIDE K         94           SAP B 16 M 3 CLMP HD K         92           SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 ANT SIDE K         106           SAP B 32 S 6 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         100           SAP B 32 S 8 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K <td></td> <td></td>		
SAP B 16 M 4 ANT SIDE K         98           SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         100           SAP B 32 M 8 CLMP HD K         100           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 ANT SIDE K         106           SAP B 32 S 6 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         100           SAP B 32 S 8 OLMP HD K         100           SAP B 32 S 8 OLMP HD K         100           SAP B 32 S 8 OLMP HD K         106           SAP B B S CLMP HD K         106           SAP B B S CLMP HD K		
SAP B 16 M 4 CLMP HD K         96           SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 CLMP HD K         102           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B B S CLMP HD K         104           SAP B B S CLMP HD K         104           SAP B B S CLMP HD K <td< td=""><td>SAP B 16 M 3 CLMP HD K</td><td>92</td></td<>	SAP B 16 M 3 CLMP HD K	92
SAP B 16 S 3 ANT SIDE K         94           SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 32 M 6 CLMP HD K         102           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B M         116           SAP B M         116           SAP B M         116	SAP B 16 M 4 ANT SIDE K	98
SAP B 16 S 3 CLMP HD K         92           SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B M D         116           SAP B M         116           SAP B M         116           SAP B MJ 50         112           SAP B MST CM         120           SAP B MST CM         120           SAP B S         116           SAP CLMP DP         122 <td>SAP B 16 M 4 CLMP HD K</td> <td>96</td>	SAP B 16 M 4 CLMP HD K	96
SAP B 16 S 4 ANT SIDE K         98           SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 CLMP HD K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 CLMP HD K         104           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B M D         116           SAP B M         116           SAP B M         116           SAP B MJ 50         112           SAP B MS CM         120           SAP B MS CM         120           SAP B MS CM         120           SAP B MS CM         120 <td>SAP B 16 S 3 ANT SIDE K</td> <td>94</td>	SAP B 16 S 3 ANT SIDE K	94
SAP B 16 S 4 CLMP HD K         96           SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 4 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         92           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 CLMP HD K         106           SAP B 32 M 8 CLMP HD K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         104           SAP B B GM         116           SAP B M         116           SAP B M         116           SAP B MJ 50         112           SAP B MS CM         120           SAP B MS CM         120           SAP B S         116           SAP CLMP DP         122	SAP B 16 S 3 CLMP HD K	92
SAP B 24 M 3 ANT SIDE K         94           SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 4 S ANT SIDE K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B B CM         120           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP DP         122           SAP CLMP DP         122           SAP CLMP HD         122	SAP B 16 S 4 ANT SIDE K	
SAP B 24 M 3 CLMP HD K         92           SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 M 8 CLMP HD K         104           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B M         116           SAP B M         116           SAP B M         112           SAP B MST CM         120           SAP B S         116           SAP CLMP DP         122           SAP CLMP HD         122           SAP CLMP HD         122           SAP D BKT         108		
SAP B 24 M 4 ANT SIDE K         98           SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         106           SAP B 32 M 8 CLMP HD K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         106           SAP B M 32 S 8 CLMP HD K         104           SAP B B M         116           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MS CM         120           SAP B S         116           SAP CLMP         122           SAP B MS CM         122           SAP B MS CM         122           SAP B MJ 50         112           SAP B MS CM         120           SAP B MS CM         120           SAP B MS C		
SAP B 24 M 4 CLMP HD K         96           SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 ANT SIDE K         100           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         104           SAP B CM         120           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122		
SAP B 24 S 3 ANT SIDE K         94           SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 ANT SIDE K         106           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         104           SAP B M         116           SAP B M         116           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP DP         122           SAP CLMP HD         122		
SAP B 24 S 3 CLMP HD K         92           SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         104           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         104           SAP B B 32 S 8 CLMP HD K         104           SAP B B M         116           SAP B M         116           SAP B MJ         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122		
SAP B 24 S 4 ANT SIDE K         98           SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         104           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         104           SAP B M         116           SAP B M         116           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP DP         122           SAP D BKT         108		
SAP B 24 S 4 CLMP HD K         96           SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         104           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         104           SAP B CM         120           SAP B M         116           SAP B MJ         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP B 32 M 6 ANT SIDE K         102           SAP B 32 M 6 CLMP HD K         100           SAP B 32 M 8 ANT SIDE K         106           SAP B 32 M 8 CLMP HD K         104           SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 CLMP HD K         106           SAP B 32 S 8 CLMP HD K         104           SAP B M         116           SAP B M         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP CLMP HD         122           SAP CLMP HD         122           SAP D BKT         108		
SAP B 32 M 6 CLMP HD K       100         SAP B 32 M 8 ANT SIDE K       106         SAP B 32 M 8 CLMP HD K       104         SAP B 32 S 6 ANT SIDE K       102         SAP B 32 S 6 CLMP HD K       100         SAP B 32 S 8 ANT SIDE K       106         SAP B 32 S 8 CLMP HD K       104         SAP B CM       120         SAP B M       116         SAP B MJ       112         SAP B MJ 50       112         SAP B MST CM       120         SAP B S       116         SAP CLMP       122         SAP CLMP DP       122         SAP CLMP HD       122         SAP CLMP HD       122         SAP D BKT       108		
SAP B 32 M 8 CLMP HD K       104         SAP B 32 S 6 ANT SIDE K       102         SAP B 32 S 6 CLMP HD K       100         SAP B 32 S 8 ANT SIDE K       106         SAP B 32 S 8 CLMP HD K       104         SAP B CM       120         SAP B M       116         SAP B MJ       112         SAP B MJ 50       112         SAP B MST CM       120         SAP B S       116         SAP CLMP       122         SAP CLMP DP       122         SAP CLMP HD       122         SAP D BKT       108		
SAP B 32 S 6 ANT SIDE K         102           SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         104           SAP B CM         120           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP B 32 S 6 CLMP HD K         100           SAP B 32 S 8 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         104           SAP B CM         120           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108	SAP B 32 M 8 CLMP HD K	104
SAP B 32 S 8 ANT SIDE K         106           SAP B 32 S 8 CLMP HD K         104           SAP B CM         120           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108	SAP B 32 S 6 ANT SIDE K	102
SAP B 32 S 8 CLMP HD K     104       SAP B CM     120       SAP B M     116       SAP B MJ     112       SAP B MJ 50     112       SAP B MST CM     120       SAP B S     116       SAP CLMP     122       SAP CLMP DP     122       SAP CLMP HD     122       SAP CLMP HD     122       SAP D BKT     108	SAP B 32 S 6 CLMP HD K	100
SAP B CM         120           SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108	SAP B 32 S 8 ANT SIDE K	106
SAP B M         116           SAP B MJ         112           SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		104
SAP B MJ     112       SAP B MJ 50     112       SAP B MST CM     120       SAP B S     116       SAP CLMP     122       SAP CLMP DP     122       SAP CLMP HD     122       SAP D BKT     108		120
SAP B MJ 50         112           SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP B MST CM         120           SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP B S         116           SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP CLMP         122           SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP CLMP DP         122           SAP CLMP HD         122           SAP D BKT         108		
SAP CLMP HD         122           SAP D BKT         108		
SAP D BKT 108		

pattern no. SAP GRMT	page
	122
SAP MA 16 4 ANT CTR K SAP MA 24 4 ANT CTR K	74
SAP MA 3 ANT CTR K	72
SAP MA 3 ANT SIDE K	72
SAP MA 3 CLMP DP K	70
SAP MA 3 CLMP K	70
SAP MA 3 FTM K	70
SAP MA 3 GRMT K	70
SAP MA 3 SW MST 12 K	72
SAP MA 3 SW MST 16 K	72
SAP MA 3 SW MST 8 K	72
SAP MA 3 WL MST 12 K	72
SAP MA 3 WL MST 16 K	72
SAP MA 3 WL MST 8 K	72
SAP MA 50 WL DIR K SAP MA 50D 16 ANT CTR K	82
SAP MA 50D 16 ANT SIDE K	86
SAP MA 50D 16 CLMP DP K	84
SAP MA 50D 16 CLMP K	84
SAP MA 50D 16 FTM K	84
SAP MA 50D 16 GRMT K	84
SAP MA 50D 24 ANT CTR K	86
SAP MA 50D 24 ANT SIDE K	86
SAP MA 50D 24 CLMP DP K	84
SAP MA 50D 24 CLMP K	84
SAP MA 50D 24 FTM K	84
SAP MA 50D 24 GRMT K	84
SAP MA 50D WL MST 12 K	86
SAP MA 50D WL MST 16 K SAP MA 50S	110
SAP MA 50S 16 ANT CTR K	80
SAP MA 50S 16 ANT SIDE K	82
SAP MA 50S 16 CLMP DP K	80
SAP MA 50S 16 CLMP K	80
SAP MA 50S 16 FTM K	80
SAP MA 50S 16 GRMT K	80
SAP MA 50S 24 ANT CTR K	80
SAP MA 50S 24 ANT SIDE K	82
SAP MA 50S 24 CLMP DP K	80
SAP MA 50S 24 CLMP K	80
SAP MA 50S 24 FTM K	80
SAP MA 50S 24 GRMT K SAP MA 50S MJ	112
SAP MA 50S POLE DCH K	82
SAP MA 50S POLE SLOT K	82
SAP MA 50S SL	110
SAP MA 50S SL 16 ANT CTR K	88
SAP MA 50S SL 16 ANT SIDE K	90
SAP MA 50S SL 16 CLMP K	88
SAP MA 50S SL 16 FTM K	88
SAP MA 50S SL 24 ANT CTR K	88
SAP MA 50S SL 24 ANT SIDE K	90
SAP MA 50S SL 24 CLMP K	88
SAP MA 50S SL 24 FTM K	88
SAP MA 50S SL POLE DCH K	90
SAP MA 50S SL POLE SLOT K SAP MA 50S SL WL DIR K	90
SAP MA 50S SL WL DIR K SAP MA 50S SL WL MST 12 K	90
SAP MA 50S SL WL MST 12 K SAP MA 50S SL WL MST 16 K	90
SAP MA 50S SL WL MST 8 K	90
SAP MA 50S WL MST 12 K	82
SAP MA 50S WL MST 16 K	82
SAP MA 50S WL MST 8 K	82
SAP MA C	108

pattern no.	page
SAP MA C SW DIR K	64
SAP MA C WL DIR K	64
SAP MA D ANT CTR K	66
SAP MA D ANT SIDE K	68
SAP MA D CLMP DP K	66
SAP MA D CLMP K	66
SAP MA D FTM K	66
SAP MA D GRMT K	66
SAP MA D SW MST 12 K	68
SAP MA D SW MST 16 K	68
SAP MA D SW MST 8 K	68
SAP MA D WL MST 12 K	68
SAP MA D WL MST 16 K	68
SAP MA D WL MST 8 K	68
SAP MA S	108
SAP MA S ANT CTR K	62
SAP MA S ANT SIDE K	62
SAP MA S CLMP DP K	60
SAP MA S CLMP K	60
SAP MA S DH K	62
SAP MA S FTM K	
SAP MA S FTM K SAP MA S GRMT K	60
SAP MA S POLE DCH K	64
SAP MA S POLE SLOT K	64
SAP MA S SW MST 12 K	62
SAP MA S SW MST 16 K	62
SAP MA S SW MST 8 K	62
SAP MA S WL MST 12 K	64
SAP MA S WL MST 16 K	64
SAP MA S WL MST 8 K	64
SAP MA SL	108
SAP MA SL 16 ANT CTR K	76
SAP MA SL 16 ANT SIDE K	78
SAP MA SL 16 CLMP K	76
SAP MA SL 16 FTM K	76
SAP MA SL 24 ANT CTR K	76
SAP MA SL 24 ANT SIDE K	78
SAP MA SL 24 CLMP K	76
SAP MA SL 24 FTM K	76
SAP MA SL POLE DCH K	78
SAP MA SL POLE SLOT K	78
SAP MA SL WL DIR K	78
SAP MA SL WL MST 12 K	78
SAP MA SL WL MST 16 K	78
SAP MA SL WL MST 8 K	78
SAP MJ	112, 150
SAP MST 12	118
SAP MST 16	118
SAP MST 24	118
SAP MST 32	118
SAP MST 8	118
SAP MST CM	120
SAP MST KNB	120
SAP POLE CH MST	124
SAP POLE DCH	124
SAP POLE SLOT	124
SAP POLE SLOT MST	124
SAP POLE50 DCH	126
SAP POLE50 SLOT	126
SAP SW DIR	122
SAP SW DIR C	124
SAP SW MST	122
SAP VESA 100 200	112
SAP VESA 200 200	112
SAP VESA 300 300	114

pattern no.	page
SAP VESA 400 400	114
SAP WL DIR SAP WL DIR C	124
SAP WL DIR C	124
SF-SB-(E, J)	
SF-SB-(GS, BS)	150
XYZ ANT SIDE	144
XYZ C ANT SIDE	140
XYZ C CLMP	140
XYZ C CLMP DP	140
XYZ C FTM	140
XYZ C GRMT	140
XYZ C POLE DCH	140
XYZ C POLE SLOT	140
XYZ CLMP	144
XYZ CLMP DP	144
XYZ CROSS	150
XYZ D CLMP	144
XYZ FTM	144
XYZ GRMT	14
XYZ MA BLOCK	148
XYZ MA C	150
XYZ MA C ANT SIDE K	142
XYZ MA C CLIP	150
XYZ MA C CLMP DP K	140
XYZ MA C CLMP K	140
XYZ MA C FTM K	140
XYZ MA C GRMT K	140
XYZ MA C POLE DCH K	145
XYZ MA C POLE SLOT K	145
XYZ MA C STRIP	150
XYZ MA CLIP	148
XYZ MA D CLMP K	138
XYZ MA S	148
XYZ MA S ANT SIDE K	134
XYZ MA S CLMP DP K	134
XYZ MA S CLMP K	134
XYZ MA S FTM K XYZ MA S GRMT K	134
XYZ MA S POLE DCH K	130
XYZ MA S POLE ECH K	130
XYZ MA S POLE ECH K	130
XYZ MJ	148
XYZ POLE DCH	144
XYZ POLE ECH	144
XYZ POLE SLOT	144
ATZ TOLE OLOT	14

## Terms & Conditions of Sales

This Selling Policy supercedes all previous selling policies. Prices, discounts and product offerings are subject to change without notice.

Sales by Knoll, Inc. or Knoll North America Corp. ("Seller") of Knoll Product Lines (hereinafter "Products") within the United States and Canada are made only on the terms which are contained in this Selling Policy. Seller hereby gives notice of its objection to any different or additional terms and conditions. This sale is expressly conditional upon Purchaser's assent to the terms and conditions set forth below. Additional terms and conditions may apply to KnollStudio and KnollTextiles orders. These terms and conditions may be modified or supplemented only by a written document signed by an authorized representative of Seller. These terms and conditions supercede any prior and/or contemporaneous agreements or correspondence between Purchaser and Seller. Written quotations expire thirty (30) days from the date of issuance and can be withdrawn by written notice anytime during that period. Where Purchaser and Seller have entered into the Knoll Electronic Terms and Conditions, all orders, acknowledgements, invoices and other business communications placed or transmitted in accordance with the Knoll Electronic Terms and Conditions shall be deemed to be in writing and signed and shall be valid for all purposes as if they were originated and maintained in documentary form.

# Ordering Information Order Confirmation Pricing Policies

All orders must be in writing. The product pattern number(s) contained on Seller's order acknowledgement shall be the final expression of the order.

A purchase order is not binding on Seller until Purchaser has received Seller's order confirmation or acknowledgment.

List prices are subject to change without notice.

List prices shall be those prices in effect on the date of receipt of a complete purchase order unless shipment is requested more than ninety (90) days after

List prices shall be those prices in effect on the date of receipt of a complete purchase order unless shipment is requested more than ninety (90) days after order entry in which case prices in effect on the date of shipment apply. List prices include specified freight costs. Unless specified in writing by Seller, no other charges are included in Seller's list prices.

**Taxes** 

All sales, use, excise and other taxes applicable to the sale of the Products shall be paid by Purchaser. If Purchaser claims an exemption from any tax, Purchaser shall submit to Seller the appropriate exemption certificates.

Terms of Payment

Payment for one hundred percent (100%) of the net order amount is due within thirty (30) days of the date of invoice, which is generally issued upon shipment. In case of any discrepancies, such as shortages, and Seller is notified in writing within ten (10) days of receipt of Product, only that portion may be deducted and the balance paid. For orders greater than \$100,000 net, a fifty percent (50%) deposit is due at the time of order placement, with the remainder due within thirty (30) days of the date of invoice.

KnollStudio orders less than \$2,000 require payment for one hundred percent (100%) of the net order amount (including any applicable sales tax and charges for inside delivery, special packaging, etc.), due at time of order placement. For KnollStudio orders greater than \$2,000, a one-half (50%) deposit is due at time of order placement with the remainder (including any applicable sales tax and charges for inside delivery, special packaging, etc.) due prior to shipment.

If, in the judgment of Seller, Purchaser's financial condition does not justify the terms of the payment, Seller may require full or partial payment in advance.

Past due accounts shall be charged one and one-half percent (1.5%) per month, or the highest rate permitted by law, whichever is less, and will be added to the outstanding balance. In the event Purchaser defaults on payment, Purchaser shall be liable for all collection costs, including reasonable attorney's fees and costs.

## Changes and Cancellation

Purchase orders may not be changed or cancelled, in whole or in part, without prior written consent of Seller. Changes may effect delivery dates. Expenses incurred because of changes shall be charged to Purchaser. In the event of cancellations, Purchaser will be liable for reasonable cancellation charges established by Seller. Orders for special Product, orders including "COM" (hereinafter defined) material and orders pursuant to expedited delivery programs, may not be canceled.

Freight Prepaid

programs, may not be canceled.

Freight is prepaid and included in the price of all Products, except KnollTextiles, within the 48 contiguous United States for orders placed with Knoll, Inc. and within Canada, excluding the Yukon, Northwest Territories, Nunavut and Newfoundland for orders placed with Knoll North America Corp. Packing is tested for rigorous motion and transportation but is not guaranteed to protect furniture from all conditions. If special packaging is required for any reason, please consult with your sales representative or dealer. Seller shall select the method of shipment and routing. Freight for all KnollTextiles orders is prepaid and added to the invoice.

#### **Delivery/Freight Charges**

Shipments outside the contiguous 48 United States and Canada shall be shipped F.O.B. Origin.

For shipments outside the contiguous United States and Canada, Purchaser is responsible for the cost of freight from point of embarkation, including any handling and transportation charges incidental to loading at the point of departure and unloading at the final destination.

Conditions beyond the control of Seller, including weather, available facilities and traffic conditions, may affect exact time of delivery. Seller shall not be responsible for specific carrier delivery date or time unless it has made a specific delivery commitment, in writing.

Nonstandard methods of shipment and/or additional services are available upon request. Purchaser will be billed for the differential cost of any special services in excess of standard surface carrier freight costs. Premium charges, at Purchaser's request, will be added for airfreight, exclusive use of vehicle and extra, export or special packaging. Accessorial charges will be added for inside delivery, extra labor, reconsignment and redelivery. Partial shipments may be made and invoiced by Seller.

#### Claims

All shipments for Knoll Products within the contiguous United States and Canada are F.O.B. Origin. All risk of loss passes to Purchaser at time of delivery to carrier. Purchaser shall inspect all Products upon receipt and notify Seller within ten (10) working days after receipt of any damage or defects which are, or should be, apparent from an inspection of the Product and its packaging. Failure of Purchaser to notify Seller during the ten (10) working day period shall constitute acceptance of the Products and waiver of any apparent defects, errors or shortages. For all claims relating to Product damaged in transit or for any other claims relating to or arising out of the transportation of the Product, Purchaser must seek recovery from the carrier and Seller has no liability to Purchaser for such claims. Seller may, upon request, assist Purchaser with filing of such claims with the carrier, but Seller will not be liable for any of these transportation related claims.

#### Seller's Security Interest

Until Seller receives the full payment for the Product, Seller shall have a security interest in the Product. Purchaser agrees to perform all acts, including but not limited to the execution and filing of documentation, which may be necessary to perfect and assure the security interest of Seller.

#### Returns

The return of Products without a written authorization by Seller shall not be accepted. To receive authorization for Product return, please call Customer Service. All Products that are returned pursuant to a valid authorization shall be subject to a twenty-five percent (25%) of list restocking charge. Products not currently offered for sale by Seller (including COM) shall not be authorized for return. All returned Products must be unused, in original condition and in the original Seller packing cartons. No refund or credit shall be given for damaged Products.

#### Held Orders/Storage

If Purchaser requests that an order be held or delayed, prices and terms and conditions in effect at the time of shipment shall apply. If Purchaser requests a delay after the time when Seller can defer production, Purchaser will be invoiced for the Product, payable in accordance with standard terms, when the order is ready for shipment. Seller may transfer the Product to storage, in which case all expenses incurred in connection with storage, including demurrage, preparation for storage, storage charges and handling shall be payable by Purchaser upon submission of invoices by Seller. Risk of loss to the Product shall pass to the Purchaser upon delivery of the Product into storage.

Customer's Own Material A Purchaser who requests a fabric or other surface material not standard to Seller's line of Products ("COM") must submit samples of the requested material to Seller prior to entry of a purchaser order. Seller shall determine if the material is suitable to its manufacturing processes and meets any requirements of Underwriters Laboratories. If the COM is acceptable, Seller will then establish a price for using the COM or the Product in question. For a description of the procedures for submitting samples and testing, contact customer resources or your sales representative. Seller shall have no responsibility for the appearance, condition, performance, durability, colorfastness or any other physical attribute of the COM. Purchaser shall indemnify and hold Seller harmless for any damages, injuries or losses arising out of or related to use of the COM on the Product.

Seller warrants to the original Purchaser only that the Products Seller manufactures and sells to Purchaser are free of defects in workmanship and materials, during the applicable warranty period set forth below.

Warranty period set forth below is for 24-hour, 7 days a week, multi shift use (includes parts and labor to repair).

Should any failure to conform with this limited warranty appear to a Product listed below during the applicable warranty period from the date of shipment, Seller shall, upon prompt written notice, repair or replace, at its option and costs, the affected part or parts.

Product and Period of Warranty

Lifetime: Antenna Workspaces, AutoStrada, Calibre, Crinion Open Table, Currents, Dividends Horizon, Morrison, Reff Profiles laminate, Series 2 Storage, Template and other non-wood components (except cascade edge worksurfaces, operational parts, controls, electrical, Lighting, Series 2 Veneer Front Storage, special or custom products, see below)

12 Years: Chadwick, Essentials Work Chairs, Generation by Knoll, Life, Moment, MultiGeneration by Knoll, ReGeneration by Knoll, Remix, and Toboggan seating (except seating upholstery, textiles, leathers and finishes, see below).

10 Years: Anchor Storage except digital keypad lock, Antenna Workspaces, AutoStrada, Crinion Open Table, Dividends Horizon, Dividends Horizon Satellite Surfaces, Reff Profiles, Template wood components, Series 2 Veneer Front Storage, cascade edge worksurfaces, Wood Casegoods (The Graham Collection) (except wood casegoods upholstered surfaces, see below), Reuter overheads, Reuter vertical storage, KnollExtra Sapper Monitor Arm Collection, Sapper XYZ Monitor Arm, Adjustable keyboard mechanisms and platforms, Communication Boards (except fabric board textiles, see below), Smokador collection (except leathers, see below), and Orchestra Universal Systems Accessories, k. lounge structural components.

5 Years: Operational parts, controls, electrical, Lighting (except light ballasts, bulbs and power supply, see below), special or custom product, wood veneer products, Currents handcrank, Interaction Counterforce, KnollStudio, Spark Series seating structural elements, structural elements of all KnollStudio outdoor products including all Richard Schultz designed products, KnollExtra CPU storage and all universal storage drawers and Power Collection, Tone

3 Years: Seating upholstery, textiles, leathers and finishes. Fabric boards textiles and Smokador Collection leathers.

2 Years: Anchor Storage digital keypad lock, all other KnollExtra product

1 Year: Light ballasts, bulbs and power supply, seating upholstered armpads and soft armpads, wood casegoods upholstered surfaces. KnollStudio, outdoor product finishes, k. lounge upholstery and k. lounge fabric.

This warranty does not apply to:

- Damage caused by a carrier other than the Seller.
- Normal wear and tear or acts or omissions of parties other than Seller (including user modification, improper use or installation of Products).
- COM or other third party materials applied to Products.
- Products not installed by or under the auspices of a Knoll Dealer.
- · Dramatic temperature variations or exposure to unusual conditions.
- Changes in surface finishes, including colorfastness due to aging or exposure to light.
- Except as specifically noted above, textiles and upholstery supplied by KnollTextiles (consult current KnollTextiles price list for applicable warranty). Natural variations occurring in wood, marble, and leather shall not be considered defects, and the Seller does not guarantee the colorfastness or matching of the colors, grains or textures, or surface hardness of such materials. The Seller also does not guarantee the colorfastness of fiberglass panel surfaces. THE EXPRESS WARRANTIES CONTAINED HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PARTICULAR PURPOSE AND ALL OTHER WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

The remedies provided above are the Purchaser's sole remedies for any failure of Seller to comply with its obligations regarding the workmanship of its Products. Correction of any nonconformity in the manner and for the period of time provided shall constitute complete fulfillment of all liabilities of Seller, with respect to or arising out of the Product furnished hereunder.

#### Delay/Force Majeure

Seller shall not be liable for failure to perform or for delay in performance due to fire, flood, strike or other labor difficulty, act of God, act of any governmental authority or of the Purchaser, riot, embargo, fuel or energy shortage, wrecks or delay in transportation, inability to obtain necessary labor, materials or manufacturing facilities from usual sources or failure of suppliers to meet their contractual obligations, or due to any cause beyond its reasonable control. If any such event occurs, Seller may extend delivery dates by a period of time necessary to overcome the effect of such delay, allocate available Product or cancel any purchase order.

#### Compliance with Law

PURCHASER IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS, ORDINANCES, REGULATIONS, RULES AND STANDARDS RELATING TO THE INSTALLATION, MAINTENANCE, USE AND OPERATION OF THE PRODUCTS.

#### **Patents**

Subject to the following provisions, Seller shall, at its own expense, defend or, at its option, settle any claim, suit or proceeding brought against the Purchaser, and/or its vendees, mediate and immediate, so far as based on an allegation that any Product or any part thereof furnished hereunder constitutes a direct or a contributory infringement of any claim of any patent of the United States or Canada. This obligation shall be effective only if Purchaser shall have made all payments then due hereunder and if Seller is notified promptly in writing and given authority, information and assistance for the defense of said claim, suit or proceeding. Seller shall pay all damages and costs awarded in such suit or proceedings so defended.

The foregoing indemnity does not apply to the following:

- Products supplied according to a design other than that of Seller, and which is required by the Purchaser.
- Combination of the Product with another product not furnished hereunder unless Seller is a contributory infringer.
- Any settlements of a suit or proceeding made without Seller's written consent.

#### Limitations of Liability

SELLER, ITS CONTRACTORS, AUTHORIZED DEALERS AND SUBCONTRACTORS OR SUPPLIERS OF ANY TIER SHALL NOT BE LIABLE TO PURCHASER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM A BREACH OF THIS AGREEMENT.

Purchaser's remedies set forth herein are exclusive and the liability of Seller with respect to the breach of this agreement or any contract entered into between the parties pursuant hereto shall not exceed the price of the Product or part on which such liability is based.

## General Ordering Information

#### The Products

This guide encompasses all standard products for this product group.

#### Sizes

Dimensions listed in this guide are indicated as:

H = height

W = width

D = depth

Dia. = diameter

Rad. = radius

#### **Pricing**

All prices shown are list.

#### **How to Order**

Select pattern numbers and quantities required for your complete installation. Product questions can be addressed in the specific sections of this guide or by contacting your sales representative or customer resource representative at 1-800-343-5665.

Next, select options (if required), along with colors and finishes appropriate to each product. Reference the Finishes and Fabrics pages for color designations.

On large installations, an item's "designated area" can be specified to assist in product organization and handling.

To expedite complete / correct entry of your order, be certain all pattern numbers, quantities, colors and area identifications are completely specified. Also, include complete purchase order numbers, bill-to and ship-to addresses, a contact name and specific factory shipping dates required.

#### Mail all orders to:

Knoll, Inc.

1235 Water Street

East Greenville, PA 18041 Attention: Order Entry

Once your order is entered at Knoll, an acknowledgment will be mailed to you. You will be advised of your scheduled shipping date within five days of the original acknowledgment. If it is necessary to revise your order, please contact your customer resource representative.

## Sustainability Statement

Sustainable design is a key component of Knoll's environmental focus. Our commitment to social responsibility and a healthy environment has prompted us to further articulate our longstanding environmental programs and, with encouragement and support from our colleagues in the industry, we have re-energized our focus on such "green" initiatives as life cycle analysis and LEED<sup>TM</sup> certification. Knoll is proud to have contributed to projects that have received LEED certification from the U.S. Green Building Council.

For the latest information on Knoll products that help our customers achieve LEED certification, log on to knoll.com, click on "About Knoll" and then "Environmental Focus."