



**International List Price Book
And Reference Guide**

Commercial Lighting Products

Effective December 15, 2004

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NOTE: Pricing and information on Fiberstars EFO® Energy Saving Systems are available in a separate Reference Pricing Guide Book.

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Lightly Expressed® Light Bars

LightBeam, LightBeam QR, LightFrame, and TRX*

Intensity	Lit Length	10 Foot Tail	20 Foot Tail	30 Foot Tail
LOW 1 Fiber Per Inch	up to 12"	\$74.80	\$83.60	\$92.40
	13" - 24"	\$125.40	\$145.20	\$165.00
	25" - 36"	\$162.80	\$189.20	\$215.60
	37" - 48"	\$211.20	\$244.20	\$277.20
	49" - 60"	\$268.40	\$360.00	\$347.60
	61" - 72"	\$325.60	\$374.00	\$422.40
	73" - 84"	\$369.60	\$422.40	\$475.20
	85" - 96"	\$422.40	\$481.80	\$541.20
	97" - 108"	\$488.40	\$561.00	\$633.60
	109" - 120"	\$532.40	\$611.60	\$690.80
MEDIUM 2 Fibers Per Inch	up to 12"	\$105.60	\$123.20	\$140.80
	13" - 24"	\$189.20	\$228.80	\$268.40
	25" - 36"	\$272.80	\$325.60	\$378.40
	37" - 48"	\$330.00	\$396.00	\$462.00
	49" - 60"	\$413.60	\$492.80	\$572.00
	61" - 72"	\$506.00	\$602.80	\$699.60
	73" - 84"	\$572.00	\$677.60	\$783.20
	85" - 96"	\$649.00	\$767.80	\$886.60
	97" - 108"	\$737.00	\$882.20	\$1,027.40
	109" - 120"	\$858.00	\$1,016.40	\$1,174.80
HIGH 4 Fibers Per Inch	up to 12"	\$149.60	\$184.80	\$220.00
	13" - 24"	\$264.00	\$343.20	\$422.40
	25" - 36"	\$374.00	\$479.60	\$585.20
	37" - 48"	\$484.00	\$616.00	\$748.00
	49" - 60"	\$572.00	\$730.40	\$888.80
	61" - 72"	\$737.00	\$930.60	\$1,124.20
	73" - 84"	\$858.00	\$1,069.20	\$1,280.40
	85" - 96"	\$1,012.00	\$1,249.60	\$1,487.20
	97" - 108"	\$1,166.00	\$1,456.40	\$1,746.80
ULTRA HIGH 8 Fibers Per Inch	up to 12"	\$253.00	\$341.00	\$407.00
	13" - 24"	\$429.00	\$561.00	\$671.00
	25" - 36"	\$605.00	\$781.00	\$957.00
	37" - 48"	\$737.00	\$957.00	\$1,177.00
	49" - 60"	\$913.00	\$1,177.00	\$1,441.00

Foci Fixtures--(ADD to the Above Bars--LB Standard Configuration ONLY)

Each FOCI fixture \$112.20 \$129.80 \$147.40

FOCI with no wash fibers is available--consult factory for details

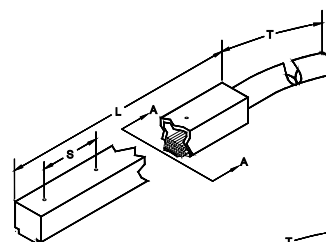
Focal Point Fixtures \$172.00 \$206.00 \$238.00

Mounting Brackets LB-MB-CL Clear (standard) \$6.00 each
LB-MB-BL Black \$6.00 each

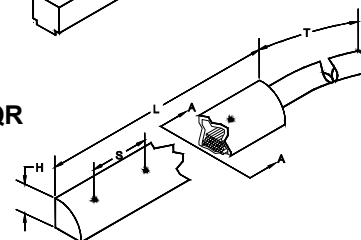
*TRX is available in High Intensity (4 fibers/inch) and Ultra High Intensity (5 fibers/inch) Only

CUSTOM OPTIONS are available--call factory for pricing

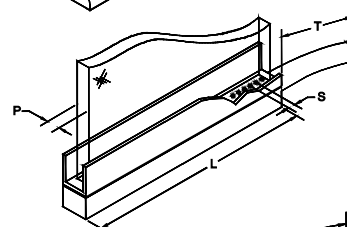
LB



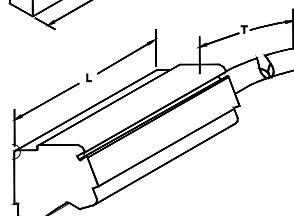
LBQR



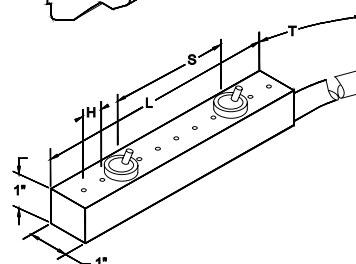
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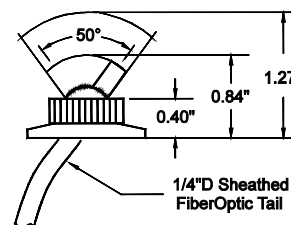
TRX



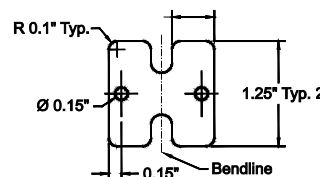
FOCI



Focal Point



LB-MB



601 Illuminator

Ordering Guide

Model Options	Color Options	Voltage Options	Accessory Option
601	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	240 240V, 60Hz	004 Special 400 Fiber Capacity
	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	220I 220V, 50Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		SM Sync Master (Use One Per Network; C4 or C8 only)
	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		SY Sync Slave (C4 or C8 only)
UL Listed for Damp Locations	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		CV Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)
	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		DX DMX Interface, Hardwired (2 Motor Control; C8 Only)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		DXLR DMX Interface, XLR Connectors (2 Motor Control; C8 Only)
			TBK T-Bar Mounting Kit
			HP Hammertone Painted

Base Unit **601-NC-120-003**

250-Watt HID Lamp, No Color, 120 Volt

\$2,400.00*(Includes lamp and zinc optical port kit)*

Additions to Base Price

C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
240	Other Domestic Voltages	\$20.00
220I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
SM	Sync Master (Use One Per Network; C4 or C8 only)	\$240.00
SY	Sync Slave (C4 or C8 only)	\$208.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	\$450.00
DX	DMX Interface, Hardwired (2 Motor Control; C8 Only)	\$1,060.00
DXLR	DMX Interface, XLR Connectors (2 Motor Control; C8 Only)	\$1,210.00
TBK	T-Bar Mounting Kit	\$36.00
HP	Hammertone Painted	\$70.00

HID-601 Replacement Lamp(s)--see 'Lamps' on page 13

602 Illuminator

Ordering Guide

Model Options	Color Options	Voltage Options	Accessory Option
602	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	240 240V, 60Hz	004 Special 400 Fiber Capacity
	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	220I 220V, 50Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		SM Sync Master (Use One Per Network; C4 or C8 only)
	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		SY Sync Slave (C4 or C8 only)
UL Listed for Wet Locations	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		CV Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)
	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		DX DMX Interface, Hardwired (2 Motor Control; C8 Only)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		DXLR DMX Interface, XLR Connectors (2 Motor Control; C8 Only)

Base Unit 602-NC-120-003	250-Watt HID Lamp, No Color, 120 Volt (Includes lamp and zinc optical port kit)	\$2,600.00
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Additions to Base Price

C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
240	Other Domestic Voltages	\$20.00
220I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
SM	Sync Master (Use One Per Network; C4 or C8 only)	\$240.00
SY	Sync Slave (C4 or C8 only)	\$208.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	\$450.00
DX	DMX Interface, Hardwired (2 Motor Control; C8 Only)	\$1,060.00
DXLR	DMX Interface, XLR Connectors (2 Motor Control; C8 Only)	\$1,210.00
HID-601	Replacement Lamp(s)--see 'Lamps' on page 13	

405N Illuminator

Ordering Guide

Model Options	Color Options	Voltage Options	Accessory Option
405N/30	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
405N/40	C1 Single Color	240 240V, 60Hz	004 Special 400 Fiber Capacity
405N/30MR	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	277 277V, 60Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
405N/40MR	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	220I 220V, 50Hz	006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
405N/30MC*	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	230I 230V, 50Hz	SM Sync Master (Use One Per Network; C4 or C8 only)
405N/42MC*	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	240I 240V, 50Hz	SY Sync Slave (C4 or C8 only)
*Uses Philips Mast	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		CV Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)
UL Listed for Damp Locations	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		DX DMX Interface, Hardwired (2 Motor Control; C8 Only)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		DXLR DMX Interface, XLR Connectors (2 Motor Control; C8 Only)
			TBK T-Bar Mounting Kit
			HP Hammertone Painted

Base Unit **405N/40-NC-120-003** 150-Watt HID Lamp, 4000 Kelvin, No Color, 120 Volt **\$798.00**
(Includes lamp and zinc optical port kit)

Additions to Base Price

30	3000K Lamp, Dichroic Reflector	No Charge
40	4000K Lamp, Dichroic Reflector	No Charge
30MR	3000K Lamp, Metal Reflector	-\$170.00
40MR	4000K Lamp, Metal Reflector	-\$170.00
30MC	3000K Lamp, Dichroic Reflector, Philips MasterColor® lamp	\$50.00
42MC	4200K Lamp, Dichroic Reflector, Philips MasterColor® lamp	\$50.00
C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
240 277	Other Domestic Voltages	\$20.00
220I 230I 240I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
SM	Sync Master (Use One Per Network; C4 or C8 only)	\$240.00
SY	Sync Slave (C4 or C8 only)	\$208.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	\$450.00
DX	DMX Interface, Hardwired (2 Motor Control; C8 Only)	\$1,060.00
DXLR	DMX Interface, XLR Connectors (2 Motor Control; C8 Only)	\$1,210.00
TBK	T-Bar Mounting Kit	\$36.00
HP	Hammertone Painted	\$70.00

Replacement Lamp(s)--see 'Lamps' on page 13

404N Illuminator

Ordering Guide

Model Options	Color Options	Voltage Options	Accessory Option
404N/30	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
404N/40	C1 Single Color	240 240V, 60Hz	004 Special 400 Fiber Capacity
404N/30MR	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	277 277V, 60Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
404N/40MR	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	220I 220V, 50Hz	006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
404N/30MC*	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	230I 230V, 50Hz	SM Sync Master (Use One Per Network; C4 or C8 only)
404N/42MC*	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	240I 240V, 50Hz	SY Sync Slave (C4 or C8 only)
*Uses Philips Mast	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		CV Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)
UL Listed for Wet Locations	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		DX DMX Interface, Hardwired (2 Motor Control; C8 Only)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		DXLR DMX Interface, XLR Connectors (2 Motor Control; C8 Only)
			WB Wall Mounting Brackets

Base Unit **404N/40-NC-120-003** 150-Watt HID Lamp, 4000 Kelvin, No Color, 120 Volt **\$1,099.00**
(Includes lamp and zinc optical port kit)

Additions to Base Price

30	3000K Lamp, Dichroic Reflector	No Charge
40	4000K Lamp, Dichroic Reflector	No Charge
30MR	3000K Lamp, Metal Reflector	-\$170.00
40MR	4000K Lamp, Metal Reflector	-\$170.00
30MC	3000K Lamp, Dichroic Reflector, Philips MasterColor® lamp	\$50.00
42MC	4200K Lamp, Dichroic Reflector, Philips MasterColor® lamp	\$50.00
C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
240 277	Other Domestic Voltages	\$20.00
220I 230I 240I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
SM	Sync Master (Use One Per Network; C4 or C8 only)	\$240.00
SY	Sync Slave (C4 or C8 only)	\$208.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	\$450.00
DX	DMX Interface, Hardwired (2 Motor Control; C8 Only)	\$1,060.00
DXLR	DMX Interface, XLR Connectors (2 Motor Control; C8 Only)	\$1,210.00
WB	Wall Mounting Brackets	\$60.00

Replacement Lamp(s)--see 'Lamps' on page 13

FS7L Illuminator

Ordering Guide

Model Options	Color Options	Voltage Options	Accessory Option
FS7L	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	220I 220V, 50Hz	004 Special 400 Fiber Capacity
	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	230I 230V, 50Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	240I 240V, 50Hz	006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		SM Sync Master (Use One Per Network; C4 or C8 only)
	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		SY Sync Slave (C4 or C8 only)
UL Listed for Damp Locations	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		CV Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)
	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		PS Plug and Switches (Not available with DR or DRC Option)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		TBK T-Bar Mounting Kit
			DR Dimmable Ready (Consumer-grade Residential Electronic Dimmer)
			DRC Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)

Base Unit **FS7L-NC-120-003**

183-Watt MR16 Lamp, No Color, 120 Volt

\$400.00*(Includes lamp and zinc optical port kit)*

Additions to Base Price

C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
220I 230I 240I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
SM	Sync Master (Use One Per Network; C4 or C8 only)	\$240.00
SY	Sync Slave (C4 or C8 only)	\$208.00
CV	Variable Delay Controller (One Per Network; Use with 3.6 RPM Motors Only)	\$450.00
PS	Plug and Switches (Not available with DR or DRC Option)	\$50.00
TBK	T-Bar Mounting Kit	\$36.00
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)	\$60.00
DRC	Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)	\$60.00
HI-110	<i>Replacement Lamp(s)--see 'Lamps' on page 13</i>	

FS13L Illuminator**Ordering Guide****Model Options****FS13L****Color Options**

NC No Color
C1 Single Color

Voltage Options

120 120V, 60Hz
220I 220V, 50Hz
230I 230V, 50Hz
240I 240V, 50Hz

Accessory Option

003 Standard 300 Fiber Capacity
004 Special 400 Fiber Capacity
005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
PS Plug and Switches (Not available with DR or DRC Option)
TBK T-Bar Mounting Kit
DR Dimmable Ready (Consumer-grade Residential Electronic Dimmer)
DRC Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)
VK Ventilation Kit

UL Listed for Damp
Locations

Base Unit FS13L-NC-120-003	(2) 100-Watt MR16 Lamps, No Color, 120 Volt	\$520.00
<i>(Includes lamps and zinc optical port kit)</i>		

Additions to Base Price

C1	Single Color	\$24.00
220I 230I 240I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
PS	Plug and Switches (Not available with DR or DRC Option)	\$50.00
TBK	T-Bar Mounting Kit	\$36.00
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)	\$60.00
DRC	Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)	\$60.00
VK	Ventilation Kit	\$180.00
(2) HI-100	<i>Replacement Lamp(s)--see 'Lamps' on page 13</i>	

FS12L Illuminator

Ordering Guide

Model Options	Color Options	Voltage Options	Accessory Option
FS12L	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	220I 220V, 50Hz	004 Special 400 Fiber Capacity
	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	230I 230V, 50Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	240I 240V, 50Hz	006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		PS Plug and Switches (Not available with DR or DRC Option)
	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		TBK T-Bar Mounting Kit
UL Listed for Damp Locations	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		DR Dimmable Ready (Consumer-grade Residential Electronic Dimmer)
	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		DRC Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		VK Ventilation Kit

Base Unit FS12L-NC-120-003	100-Watt MR16 Lamp, No Color, 120 Volt (Includes lamp and zinc optical port kit)	\$380.00
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Additions to Base Price

C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
220I 230I 240I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
PS	Plug and Switches (Not available with DR or DRC Option)	\$50.00
TBK	T-Bar Mounting Kit	\$36.00
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)	\$60.00
DRC	Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)	\$60.00
VK	Ventilation Kit	\$180.00
HI-100	Replacement Lamp(s)--see 'Lamps' on page 13	

FS11L Illuminator**Ordering Guide**

Model Options	Color Options	Voltage Options	Accessory Option
FS11L	NC No Color	120 120V, 60Hz	003 Standard 300 Fiber Capacity
	C1 Single Color	220I 220V, 50Hz	004 Special 400 Fiber Capacity
	C4/1 Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	230I 230V, 50Hz	005 Special 450 Fiber Capacity (Star Ceilings, White Light Only)
	C4/3 Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	240I 240V, 50Hz	006 Special 600 Fiber Capacity (Star Ceilings, White Light Only)
	C8/1 Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)		PS Plug and Switches (Not available with DR or DRC Option)
	C8/3 Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)		TBK T-Bar Mounting Kit
UL Listed for Damp Locations	SPW Sparkle Wheel (Add to C4 or C8 only, 400 strands max)		DR Dimmable Ready (Consumer-grade Residential Electronic Dimmer)
	SPW/N Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)		DRC Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)
	DWM/ Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)		VK Ventilation Kit

Base Unit FS11L-NC-120-003	75-Watt MR16 Lamp, No Color, 120 Volt	\$340.00
<i>(Includes lamp and zinc optical port kit)</i>		

Additions to Base Price

C1	Single Color	\$24.00
C4/1	Four-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$64.00
C4/3	Four-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$48.00
C8/1	Eight-Color Wheel, 1 RPM (Specify Colors and Sequence)	\$120.00
C8/3	Eight-Color Wheel, 3.6 RPM (Specify Colors and Sequence)	\$104.00
SPW	Sparkle Wheel (Add to C4 or C8 only, 400 strands max)	\$40.00
SPW/NC	Sparkle Wheel (w/motor, specify 1 or 3.6 RPM, 400 strands max)	\$48.00
DWM/NC	Dimming Wheel, Mechanical (w/motor, specify 1 or 3.6 RPM, not used w/color wheel)	\$56.00
220I 230I 240I	International Voltages	\$20.00
004	Special 400 Fiber Capacity	\$10.00
005	Special 450 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
006	Special 600 Fiber Capacity (Star Ceilings, White Light Only)	\$10.00
PS	Plug and Switches (Not available with DR or DRC Option)	\$50.00
TBK	T-Bar Mounting Kit	\$36.00
DR	Dimmable Ready (Consumer-grade Residential Electronic Dimmer)	\$60.00
DRC	Dimmable Ready (Commercial-grade Architectural Electronic Dimmer)	\$60.00
VK	Ventilation Kit	\$180.00
HI-075	<i>Replacement Lamp(s)--see 'Lamps' on page 13</i>	

FS1L Illuminator

Ordering Guide

Model Options

FS1L

Color Options

NC No Color
CCW Custom Color Wheel
CSW Custom Sparkle Wheel

Voltage Options

120 120V, 60Hz

Accessory Option

CUST Custom Special Effect
(Priced on Application--call for details)
ANI Custom Animation
(Priced on Application--call for details)

UL Listed for Dry
Locations

Base Unit **FS1L-NC-120-003**

71-Watt MR16 Lamp, No Color, 120 Volt
(Includes lamp; fiber is custom harnessed)

\$1,162.00

Additions to Base Price

CCW	Custom Color Wheel	\$296.00
CSW	Custom Sparkle Wheel	\$70.00
CUST	Custom Special Effect (Priced on Application--call for details)	Consult Factory
ANI	Custom Animation (Priced on Application--call for details)	Consult Factory
HI-071	<i>Replacement Lamp(s)--see 'Lamps' on page 13</i>	

Illuminator Options And Accessories

Part Number:	Description:	Use:	List Price:
Color Wheels			
PT-01C*	4 Color, 2" Square	007, 301, 401, 402, 403	\$55.00
PT-05C*	4 Color, 2" Square	501	\$55.00
PT-07C*	4 Color, 2" Square	FS2L, FS7L, FS11L, FS12L, FS13L, 201, 404, 404N, 405, 405N, 601, 602, 701	\$55.00
PT-08C*	8 Color, 3" Octagon	007, 301, 401, 402, 403, 501	\$110.00
PT-09C*	8 Color, 3" Octagon	FS2L, FS7L, FS11L, FS12L, FS13L, 201, 404, 404N, 405, 405N, 601, 602, 701	\$110.00
PT-10C*	4 Color, 2.8" Square	FS2L, FS7L, FS11L, FS12L, FS13L, 201, 404, 404N, 405, 405N, 601, 602, 701	\$134.00
PT-11C*	8 Color, 3.25" Octagon	FS2L, FS7L, FS11L, FS12L, FS13L, 201, 404, 404N, 405, 405N, 601, 602, 701	\$176.00
C40*	4 Color, 3.4" Circle	FS68	\$140.00
SPKWL*	Perforated Metal Sparkle Wheel	Perforated Metal Sparkle Wheel; without motor; 400 Strands Maximum	\$44.00
DIMWL*	Perforated Metal Dimming Wheel	Perforated Metal Sparkle Wheel; 20%, 40%, 60%, and 100% transmission.	\$44.00

***Motor is NOT included with wheels**

Optical Ports			
A10980	Zinc Port, 300 Fibers (standard size)	007, FS2L, FS7L, FS11L, FS12L, FS13L, 403, 404, 404N, 405, 405N, 601, 602	\$66.00
C10641-33	Zinc Port Tip, 400 Fibers	007, FS2L, FS7L, FS11L, FS12L, FS13L, 403, 404, 404N, 405, 405N, 601, 602	\$10.00
C10641-45	Zinc Port Tip, 450 Fibers	007, FS2L, FS7L, FS11L, FS12L, FS13L, 403, 404, 404N, 405, 405N, 601, 602	\$10.00
C10643	Zinc Port Tip, 600 Fibers	007, FS2L, FS7L, FS11L, FS12L, FS13L, 403, 404, 404N, 405, 405N, 601, 602	\$10.00
HID-300	Aluminum Port, 300 Fibers	201, 301, 401, 402	\$66.00
HID-407	Plastic Port, 300 Fibers	007, 403	\$66.00
HID-507	Plastic Port, 300 Fibers	501	\$66.00
HID-707	Port Kit for 701, 300 Fibers	701	\$84.00

Mounting Accessories			
FS-VK	Ventilation Kit for FS11L, FS12L, FS13L		\$180.00
FS-WB	Wall Mount Bracket		\$60.00
TBK	T-Bar Mounting Kit		\$36.00

Lamps			
HI-071	71 Watts, MR16, 3000K	FS1L	\$31.40
HI-075	71 Watts, MR16, 3000K	007, 007C, FS2L, FS11L	\$18.00
HI-100	100 Watts, MR16, 3000K	FS12L, FS13L	\$33.80
HI-110	183 Watts, MR16, 3000K	FS7L, 201	\$33.80
HID-68	68 Watt, Metal Halide, 3500K	FS68	\$81.60
HID-303	150 Watt, Metal Halide, 3000K	301, 401, 402, 403	\$281.00
HID-304	150 Watt, Metal Halide, 4000K	301, 401, 402, 403	\$281.00
HID-430	150 Watt, Metal Halide, 3000K	404, 404N, 405, 405N	\$301.00
HID-440	150 Watt, Metal Halide, 4000K	404, 404N, 405, 405N	\$301.00
HID-430MC	150 Watt, Metal Halide, 3000K, Philips MasterColor® source	404, 404N, 405, 405N	\$351.00
HID-440MC	150 Watt, Metal Halide, 4200K, Philips MasterColor® source	404, 404N, 405, 405N	\$351.00
HID-430MR	150 Watt, Metal Halide, 3000K, Metal Reflector	404, 404N, 405, 405N	\$129.00
HID-440MR	150 Watt, Metal Halide, 4000K, Metal Reflector	404, 404N, 405, 405N	\$129.00
HID-504	400 Watt, Metal Halide, 5600K	501	\$561.00
HID-601	250 Watt, Metal Halide, 6400K	601, 602	\$480.00
HID-701	400 Watt, Metal Halide, 5600K	701, 701TT	\$610.00

Fiber Optic Cable

Side-Emitting

Part Number	Qty of Strands	Outer Diameter	Min Bend Radius	Max Spool Length (ft)	Outer Jacket	List Price	Technical Remarks:
BritePak® III							
<i>Stranded Cable</i>							
Side emitting stranded optical fiber. Patented cabling method allows maximum light distribution through the clear outer jacket. Recommended in lengths up to 100' for direct view applications, 50' for indirect applications. Both ends should be terminated. Can be cut to length at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Minimum bend radius is 4x outer diameter. Priced Per Foot.							
BPAK-III-15	14	0.2", 5mm	0.8", 20mm	1000'	Clear PVC	\$4.80	
BPAK- III-40	42	0.24", 6mm	0.9", 24mm	1000'	Clear PVC	\$8.20	
BPAK- III -50	49	0.32", 8mm	1.3", 32mm	1000'	Clear PVC	\$10.50	
BPAK- III -75	77	0.39", 10mm	1.6", 40mm	800'	Clear PVC	\$12.80	
BPAK- III -100	98	0.43", 11mm	1.7", 44mm	600'	Clear PVC	\$14.40	
BPAK- III -150	140	0.55", 14mm	2.2", 56mm	500'	Clear PVC	\$19.00	

SuperStars®

Stranded Cable

SuperStars fiber creates an unbreakable decorative linear look of diamonds along its length. Available in two different sizes for use in low light applications such as isle way lighting. Recommended in lengths up to 100'. Both ends should be terminated. Can be cut and harnessed at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Minimum bend radius is 4x outer diameter. Priced Per Foot.

SS-15	14	0.2", 5mm	0.8", 20mm	500'	Clear PVC	\$5.10	Diamonds of light 1 1/4" on center
SS-50	49	0.32", 8mm	1.3", 32mm	500'	Clear PVC	\$11.00	Diamonds of light 1 3/4" on center

Fiber Optic Cable

End-Emitting

Part Number	Qty of Strands	Outer Diameter	Min Bend Radius	Max Spool Length (ft)	Outer Jacket	List Price	Technical Remarks:
FiberSpots® II							
<i>Stranded Cable</i>							
End emitting stranded fiber optic cable. Can be used with all stranded fiber fixtures for downlighting, case lighting, step lighting and for creating decorative patterns of light. Recommended in lengths up to 30'. Can be cut, harnessed, and ferruled at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Use LB-HK-3, FS-163, or FS-118 tools for ferruling. Minimum bend radius is 4x outer diameter. Factory harnessing available upon request. Consult factory. Priced Per Foot.							
FSPT-II-1	1	0.16", 4mm	0.6", 16mm	1000'	Black PVC	\$0.50	
FSPT-II-2	2	0.16", 4mm	0.6", 16mm	1000'	Black PVC	\$0.60	
FSPT-II-3	3	0.2", 5mm	0.8", 20mm	1000'	Black PVC	\$0.90	
FSPT-II-5	5	0.2", 5.1mm	0.8", 20mm	1000'	Black PVC	\$1.20	
FSPT-II-8	8	0.24", 6mm	0.9", 24mm	1000'	Black PVC	\$1.40	
FSPT-II-10	10	0.24", 6mm	0.9", 24mm	1000'	Black PVC	\$1.50	
FSPT-II-12	12	0.28", 7mm	1.1", 28mm	1000'	Black PVC	\$1.70	
FSPT-II-18	18	0.28", 7mm	1.1", 28mm	1000'	Black PVC	\$2.20	
FSPT-II-25	25	0.28", 7mm	1.1", 28mm	1000'	Black PVC	\$2.60	
FSPT-II-30	30	0.28", 7mm	1.1", 28mm	1000'	Black PVC	\$3.50	
FSPT-II-50	50	0.39", 10mm	1.6", 40mm	1000'	Black PVC	\$4.30	
FSPT-II-62	62	0.42", 10.7mm	1.7", 43mm	1000'	Black PVC	\$5.30	
FSPT-II-75	75	0.43", 11mm	1.7", 44mm	1000'	Black PVC	\$6.30	
FSPT-II-100	100	0.51", 13mm	2", 52mm	600'	Black PVC	\$8.50	
FSPT-II-150	150	0.59", 15mm	2.4", 60mm	500'	Black PVC	\$15.20	
FSPT-II-225	225	0.75", 19mm	3", 76mm	250'	Black PVC	\$19.50	
FSPT-II-300	300	0.79", 20mm	3.1", 80mm	250'	Black PVC	\$21.50	

Fire Rated Jacket Cable

Stranded Cable

End emitting fiber optic cable enclosed in a fire-rated outer jacket. Can be used with all stranded fiber fixtures for downlighting, case lighting, step lighting and applications requiring fire-rated cable. Recommended in lengths up to 30'. Can be cut, harnessed, and ferruled at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Use LB-HK-3, FS-163, or FS-118 tools for ferruling. Minimum bend radius is 10x outer diameter. Priced Per Foot.

FRFS-25	25	0.59", 15mm	5.9", 150mm	500'	White PVC	\$3.50	
FRFS-50	50	0.59", 15mm	5.9", 150mm	500'	White PVC	\$5.20	
FRFS-75	75	0.59", 15mm	5.9", 150mm	500'	White PVC	\$7.40	

Star Cable

Stranded Cable

End emitting fiber optic cable in different diameters to create star ceilings or other points of light that require varying degrees of brightness. Recommended for star ceilings in lengths up to 30'. Can be cut and harnessed at factory or in field. Use LB-HK-3 or FS-163 tools for harnessing. Minimum bend radius is 4x outer diameter. Priced Per Foot.

FS-30-J-2.2	1	0.16", 4mm	0.6", 16mm	1000'	Black PVC	\$0.50	Contains a single 0.75mm diameter strand
FS-40-J-2.2	1	0.14", 3.6mm	0.6", 14mm	1000'	Black PVC	\$0.70	Contains a single 1.0mm diameter strand
FS-60-J-2.2	1	0.14", 3.6mm	0.6", 14mm	1000'	Black PVC	\$1.10	Contains a single 1.5mm diameter strand
FS-80-J-3.0	1	0.14", 3.6mm	0.6", 14mm	1000'	Black PVC	\$2.10	Contains a single 2.0mm diameter strand
STAR-34/50	34	0.43", 11mm	1.7", 44mm	1000'	Black PVC	\$6.30	Contains 34 strands (24 @ 0.75mm, 7 @ 1.0mm, and 3 @ 1.5mm) that occupy 50 strands of space

Fixtures

Part Number	Description	Finish Options	List Price:
Accent			
Interior			
Fixed, Lensed			
CRE2501	Fixed Lens Downlight	White, Black, Silver, or Gold	\$119.90
FE-1111-XX	Fiberscent, Fixed Aim	White or Matte Black	\$67.90
		Specular Silver or Polished Brass	\$79.90
FE-1701-XX	Futura, Fixed Aim Bevel Trim <i>Includes FE-1700, FE-3112-CK, and Ferrules</i>	White or Black	\$119.90
		Aluminum or Anthracite	\$129.90
FE-1702-XX	Futura, Fixed Aim Rivet Trim <i>Includes FE-1700, FE-3112-CK, and Ferrules</i>	Gold, Silver, Brushed Chrome, or Graphite	\$137.90
		White or Black	\$119.90
		Aluminum or Anthracite	\$129.90
		Gold, Silver, Brushed Chrome, or Graphite	\$137.90
FE-3112-CK	Lensed MR-16 Insert		\$52.00
LBM06100721	Large Lens Accent Fixture	Brass	\$71.90
LBM06100722	Large Lens Accent Fixture	Silver	\$81.90
LBM061108301	4-Degree Lens		\$7.90
LBM061108304	20-Degree Lens		\$7.90
Fixed, Unlensed			
CRE1119	90-Degree Mirror		\$63.90
CRE2502-XX	Clear or Frosted Glass Downlight	White, Black, Silver, or Gold	\$115.90
HPDL-15	High Cut-Off Spotlight, 15-Degree		\$39.90
HPDL-24	High Cut-Off Spotlight, 24-Degree		\$39.90
HPDL-40	High Cut-Off Spotlight, 40-Degree		\$39.90
LBM061209118	Steplight or Wall Light	Black	\$99.90
LBM061209119	Steplight or Wall Light	Silver	\$99.90
Adjustable, Lensed			
CRE1001-XX	Lensed Fully Adjustable	White or Black	\$137.90
		Gold or Silver	\$145.90
CRE2225-XX	Miniature Lensed Spotlight <i>Threaded Ferrule Required</i>	Black or Silver	\$97.90
CRE2231-XX	Miniature Adjustable Lensed Downlight <i>Threaded Ferrule Required</i>	White, Black, Silver, or Gold	\$131.90
FE-1604-XX	Futura, Adjustable Aim, Beveled Trim	White or Black	\$72.00
		Gold, Silver, Brushed Chrome, Aluminum, Anthracite, or Graphite	\$91.00
FE-2211-XX	Fiberscent, Adjustable Aim	White or Matte Black	\$71.90
		Gold or Chrome	\$85.90
LBM06100621	Lensed Fixture	Brass	\$115.90
LBM06100622	Lensed Fixture	Silver	\$115.90
LBM06100822	Extended Lensed Fixture		\$81.90
LBMFLEX-LGL	Flexible Tube--Large Diameter	Various Lengths and Colors	Consult Factory
Adjustable, Unlensed			
CRE2224-XX	Miniature Spotlight	Black or Silver	\$65.90
LBM061001251	Caselight 1		\$109.90
LBM061001252	Caselight 2		\$75.90
LBM061001253	Caselight 3		\$75.90
LBM06100524	Caselight 4		\$27.90
LBM06100624	Caselight 5		\$121.90
LBM06100222	Lensless Aimable Fixture		\$85.90
LBMFLEX-LG	Flexible Tube--Large Diameter	Various Lengths and Colors	Consult Factory
LBMFLEX-SM	Flexible Tube--Small Diameter	Various Lengths and Colors	Consult Factory

Fixtures

Part Number	Description	Finish Options	List Price:
Exterior			
Adjustable, Lensed			
CRE2223	Stem Mounted Spotlight		\$171.90
CRE2610	Buried Adjustable Spotlight		\$1,299.90
LBM06120420	Round, Recessed Adjustable Accent		\$175.90
Adjustable, Unlensed			
FS-210	FiberTwist <i>Mount with FS-910 (see 'Anchors')</i>		\$40.00
FS-912	Extension for FS-210		\$14.00

Decorative

Interior

Fixed, Unlensed

CRE1101	Micro Bullet		\$2.00
CRE1102	Mini Bullet		\$2.00
CRE1103	Bullet		\$5.90
CRE1104	Maxi Bullet		\$9.90
CRE1105	Icicle Bullet		\$7.90
CRE1106	Opal Ball		\$2.00
CRE1107	5 Point Star		\$4.00
CRE1108-XX	Micro Bullet With Bezel	Black or White	\$3.90
CRE1109-XX	Mini Bullet With Bezel	Black or White	\$3.90
CRE1110-XX	Bullet With Bezel	Black or White	\$7.90
CRE1111-XX	Bullet With Bezel	Black or White	\$7.90
CRE1112-XX	Maxi Bullet With Bezel	Black or White	\$11.90
CRE1113-XX	5 Point Star With Bezel	Black or White	\$5.90
CRE1114-XX	Opal Ball With Bezel	Black or White	\$5.90
CRE2503-XX	Sparkle Point	Black, White, Silver, or Gold	\$101.90
CRE2504-XX	Drop Acrylic Rod	Black, White, Silver, or Gold	\$101.90
CRE2505-XX	Drop Acrylic Cone	Black, White, Silver, or Gold	\$105.90
CRE2506-XX	Drop Acrylic Tube	Black, White, Silver, or Gold	\$105.90
CRE2507-XX	Wall Washer	Black, White, Silver, or Gold	\$113.90
FE-9001	Fine Point		\$14.20
FE-9002	Ball Lens		\$21.90
FE-9003	Crystal Point		\$22.80
FE-9004	Large Crystal Point		\$30.00
FE-9050	Mini Bullet Fixture with Ferrule		\$2.80
A11773	Ferrule (use with or without FE-9050)		\$0.90
FIBERGLOBE	Hollow Plastic "G" Lamp	Clear or Frosted	\$30.00
FS-310-5	FiberStick-5" <i>Mount with FS-910 (see 'Anchors')</i>		\$56.00
FS-310-9	FiberStick-9" <i>Mount with FS-910 (see 'Anchors')</i>		\$64.00
FS-310-12	FiberStick-12" <i>Mount with FS-910 (see 'Anchors')</i>		\$72.00

Exterior

Fixed, Unlensed

CRE2601	Micro Mini Bollard		\$91.90
CRE2602	Micro Decorative Flat Bollard		\$115.90
CRE2603	Micro Lateral Flat Bollard		\$123.90
CRE2604	Micro Domed Flat Bollard		\$121.90

Fixtures

Part Number	Description	Finish Options	List Price:
Paver			
Exterior			
Fixed, Unlensed			
CRE1207-XX	Micro Paver	Clear or Frosted Lens	\$59.90
CRE1208-XX	Mini Paver	Clear or Frosted Lens	\$117.90
CRE1209-XX	Standard Paver	Clear or Frosted Lens	\$143.90
CRE1210-XX	Domed Paver	Clear or Frosted Lens	\$139.90
CRE2320-XX	Eyelid Paver	Clear or Frosted Lens	\$227.90
CRE2321-XX	Small Screw-Fix Paver	Clear or Frosted Lens	\$145.90
CRE2322-XX	Large Screw-Fix Paver	Clear or Frosted Lens	\$143.90
CRE2323	Cone Paver	Clear Lens	\$139.90
CRE2324	Dichroic Glass Paver		\$159.90
CRE2325	Large Domed Paver	Frosted Lens	\$221.90
CRE2302	Optional Spring Mounting Adapter for CRE-2320, -2321, -2322, -2323		\$31.90
FS-710	Small Tile Paver Fixture		\$68.00
FS-711-XX	Large Tile Paver Fixture	Flat or Domed Frosted Cover	\$112.00
FS-712	Small Poured-In Place Paver Fixture		\$20.00
FS-713	Large Poured-In Place Paver Fixture		\$20.00

Underwater

Exterior

Fixed, Lensed

CRE2153	Fountain Spotlight		\$101.90
LBM06100819	Lensed Fountain Spotlight	Stainless Steel	\$73.90
LBM06100820	Lensed Fountain Spotlight	Bronze	\$75.90
LBM061208202	Mini-Fountain Fitting		\$57.90
LNS-100-X	Underwater Lensed Fixture <i>Also order FS-117 (See 'Tools')</i>	LNS-100G (White) or LNS-100BLG (Black)	\$30.00
		LNS-100A (White, with Locking Nut)	\$30.00
		Optional B11458 Broadcast Lens	\$10.00
LNS-225-X	Underwater Lensed Fixture <i>Also order FS-117 (See 'Tools')</i>	LNS-225G (White)	\$30.00
		LNS-225A (White with Locking Nut)	\$30.00
		Optional B11458 Broadcast Lens	\$10.00

Fixed, Unlensed

LBM06102030S2	Underwater Lensed Fixture	Stainless Steel	\$503.90
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Adjustable, Lensed

LBM06102120	Recessed Underwater Accent		\$363.90
LBM06102121	Yoke Mounted Underwater Accent		\$135.90

Ferrules

Part Number	Description	Notes	List Price
A10516-01	Ferrule, 25 strands	For FE-1111-XX, FE-2211-XX, & FE-3112-CK	\$3.20
A10516-02	Ferrule, 50 strands	For FE-1111-XX, FE-2211-XX, & FE-3112-CK	\$3.20
A10516-03	Ferrule, 75 strands	For FE-1111-XX, FE-2211-XX, & FE-3112-CK	\$3.20
A10516-04	Ferrule, 100 strands	Custom, consult factory for fixture use	\$3.20
A10516-05	Ferrule, 150 strands	Custom, consult factory for fixture use	\$3.20
CRE-FRL8	Ferrule, 8mm, 50 strands	For CRE fixtures, specify strand count used	\$10.00
CRE-FRL10	Ferrule, 10mm, 75 strands	For CRE fixtures, specify strand count used	\$10.00
CRE-M10/25	Ferrule, 10mm Threaded, 25 strands	For CRE threaded fixtures, 1-25 strands	\$10.00
CRE-M10/50	Ferrule, 10mm Threaded, 50 strands	For CRE threaded fixtures, 26-50 strands	\$10.00
CRE-M10/75	Ferrule, 10mm Threaded, 75 strands	For CRE threaded fixtures, 51-75 strands	\$10.00
LBM00602011	Ferrule, 8mm, 3 strands	For LBM fixtures, specify strand count used	\$10.00
LBM00602061	Ferrule, 8mm, 5 strands	For LBM fixtures, specify strand count used	\$10.00
LBM00602021	Ferrule, 8mm, 12 strands	For LBM fixtures, specify strand count used	\$10.00
LBM00602031	Ferrule, 8mm, 25 strands	For LBM fixtures, specify strand count used	\$10.00
LBM00602051	Ferrule, 8mm, 30 strands	For LBM fixtures, specify strand count used	\$10.00
LBM00602041	Ferrule, 8mm, 50 strands	For LBM fixtures, specify strand count used	\$10.00
LBM00602081	Ferrule, 10mm, 75 strands	For LBM fixtures, specify strand count used	\$10.00

Star Kits

Part Number	Description	Notes	Price Each
Star Kit A	Small Star Kit	10 foot fiber tails; 120V and 240V	\$689.00
Star Kit B	Small Star Kit, with Shooting Star	10 foot fiber tails; 120V only	\$1,625.00
Star Kit C	Large Star Kit, with 2 Shooting Stars	20 foot fiber tails; 120V only	\$2,759.00

Tools, Accessories, and Services

Part Number:	Description:	Details:	List Price:
Anchors			
FS-112	Epoxy, 2-part	Use with FS-113, FS-114	\$20.50
FS-113	Epoxy Mixing Nozzle	Use with FS-112, FS-114	\$2.00
FS-114	Epoxy Applicator Gun	Use with FS-112, FS-113	\$110.00
FS-115	Epoxy Epoxy Kit	Approved for adhering fibers and ferrules; disposable kit	\$26.00
FS-131	Double-sided Tape	For TEMPORARY mounting of side-emitting fiber cables; 5/16" wide x 165' long (8mm x 50m); use with FS-136	\$33.00
FS-136	Silicone Adhesive	Approved for adhering side-emitting fibers and track, 10.3oz Tube (300 ml)	\$12.00
FS-138	Silicone Adhesive (case)	Approved for adhering side-emitting fibers and track, case of (24) 10.3oz Tubes (300 ml)	\$260.00
FS-910	Ground Mounting Stake	6 inch (150mm) black plastic stake used for installing FS-210 and FS-310 into soil or similar materials.	\$6.00
FS-912	Extension for FS-210	6 inch (150mm) black plastic ball joints used for extending the length of the FS-210.	\$14.00
HI-102	P-Clips, 0.48"w x 0.84"l x 0.38"h (12mm x 21mm x 10mm)	PVC clips for mounting BPAK-15 and SS-15 in curved lines and securing very small FSPT if desired	\$0.40
HI-103	P-Clips, 0.48"w x 1"l x 0.48"h (12mm x 25mm x 12mm)	PVC clips for mounting BPAK-40, BPAK-50, and SS-50 in curved lines and securing small FSPT if desired	\$0.40
HI-104	P-Clips, 0.48"w x 1.2"l x 0.62"h (12mm x 30mm x 16mm)	PVC clips for mounting BPAK-75 and BPAK-100 in curved lines and securing medium FSPT if desired	\$0.40
HI-105	P-Clips, 0.48"w x 1.2"l x 0.68"h (12mm x 30mm x 17mm)	PVC clips for mounting BPAK-150 in curved lines and securing large FSPT (up to FSPT-150) if desired	\$0.80
RFL-4	Track, 1.875"w x 5' Long x 0.32"h (48mm x 1524mm x 8mm)	Reflective Track for mounting BPAK; use with u-Track and Double Sided Tape	\$21.70
TRK-5/8	U-Track, 0.63" Square x 6' Long (16mm x 1.83m)	PVC extrusion for mounting BPAK-150 cable in straight or slightly curved lines	\$15.60
TRK-U1/2	U-Track, 0.59" Square x 6' Long (15mm x 1.83m)	PVC extrusion for mounting BPAK-75 and BPAK-100 cable in straight or slightly curved lines	\$13.20
TRK-U3/8	U-Track, 0.46" Square x 6' Long (11.7mm x 1.83m)	PVC extrusion for mounting BPAK-40 and BPAK-50 cable in straight or slightly curved lines	\$10.20
Cutting Tools			
FS-118	Light-Duty Hot Knife with New-Style Shovel-Type Blade	60 watt electric hot knife for porting small bundles of fiber into ferrules or small port tips; 120V only	\$132.00
FS118A	5 Replacement Blades	Old-Style (X-acto) blades for FS-118	\$8.80
FS-163	Standard Hot Knife	Butane hot knife for porting bundles of fiber into ferrules or port tips.	\$390.00
01-15001-00	Replacement Blade	Shovel-type blades; For FS-163 and New-Style FS-118	\$38.00
LB-HK-3	Heavy Duty Hot Knife	Contractor grade electric hot knife for porting bundles of fiber into ferrules or port tips; 120V only	\$600.00
LB-HK3-BLADE	Replacement Blade		\$30.00
Installation Tools			
FS-117	Lens Wrench for LNS Fixture	Used to tighten lens onto lens housing	\$10.50
FS-915	Lens Wrench for FS-711 Fixture	Used to tighten lens onto fixture	\$68.00
FS-DP4	Star Ceiling Drill Bit Kit	Set of (4) bits in three sizes for use drilling through gypsum (drywall) or cellulose (ceiling tile) ceilings	\$20.00
Services			
HF-1	Factory Assembled Harness/Port	Per port, does not include assembly of ferruled tips or any materials	\$40.00
HF-2	Factory Assembled Ferrule Tips	Per tip, does not include assembly of harness/port or any materials	\$40.00
HF-4	Factory Fiber Cutting	Per cut, fiber cut to length. Does not include assembly of ferruled tips, harness/port, or any materials	\$30.00

POLICIES: Order Processing

BEFORE AN ORDER CAN BE RELEASED TO MANUFACTURING:

1. The original purchase order must be sent via fax, e-mail or mail.
2. If the order does not meet the minimum order amount of \$100, a \$25 service charge will be added to the order, except for replacement parts (lamps, c/w motor, ballast, etc).
3. The purchase order must reference a job name, specifier, job location, Fiberstars estimate/quote number and terms.
4. **FOB & PPD: Customer Purchase Order must reflect our standard freight terms, collect, no freight allowed. Order must state: FOB-Fremont, Factory, Origin, or Shipping Point.**
5. To ensure the fastest delivery, all pertinent information needs to be included. Lack of complete information will delay the order process.
6. International orders will be held and shipped complete unless otherwise indicated on the purchase order.

Product Specifications

1. When listing individual part numbers, always make sure that every part number is complete. For example, when ordering any illuminator, specify the following:
 - a. Type of lamp for 404N and 405N only — 3000°K or 4000°K
 - b. Speed of color wheel motor (1.0 or 3.6 RPM)
 - c. Color wheel selection (for C1, C4 or C8) and the sequence of colors, start color for synchronized units
 - d. Voltage/Hz (120V, 60 Hz, etc.)
 - e. Options (synchronization, variable delay, dimmable ready, DMX, etc)
2. When ordering fiber optic cable or track, the quantity should be indicated as a unit of measure: fiber footage / # of pieces of track. (If more than one cut is required on fiber length, a cutting charge per cut will be incurred)
3. Make sure all installation materials are included in the order such as silicone, epoxy, ferrules double-sided tape, etc.
4. Always remember to add a hot knife to all new orders. It is a required and reusable tool for installation (Part number FS-118, FS-163, or LB-HK3)

POLICIES: International Terms and Conditions

Credit All payments must be made in U.S. dollars. International orders will only be accepted with wire transfer, letter of credit, credit card, or U.S. funds check on U.S. bank with order. Payment may be rendered in one of the following methods:

1. Prepayment Mail to: Fiberstars, Inc.
 Attn.: Accounts Receivable
 44259 Nobel Drive
 Fremont, CA 94538

2. Direct Wire Transfer or Irrevocable Commercial Letter of Credit:

Bank Information:
Comerica Bank
333 West Santa Clara
San Jose, CA 95113
Account: 1891867473
ABA Number: 121137522
SWIFT Code: MNBDUS33

Beneficiary:
Fiberstars, inc.
44259 Nobel Drive
Fremont, CA 94538
Telephone: 510-490-0719

Charges: All banking charges are for the account of the applicant. A \$200 US processing fee will be charged for any L/C under \$10,000 US.

3. Credit Card Visa, MasterCard, or American Express may be used for pre-payment. **A three percent (3%) service charge will be added on all credit card transactions.**

Orders Orders will only be accepted with a written purchase order signed by the purchaser. Written confirmation of a phone order must be clearly marked "CONFIRMATION." Fiberstars will not be responsible for duplications.

Cancellation If a sales order is cancelled after the order is in production, there will be a \$100.00 cancellation processing fee as well as up to a 50% restocking charge.

Freight All prices are F.O.B. Fremont, CA, USA. Shipping method must be specified on the purchase order. If method is not indicated, Fiberstars will choose best method. All estimates of freight costs before actual shipment are only estimates and Fiberstars is not liable for the difference between an estimate and the actual cost of the shipment.

Loss or Damage The purchaser should take up loss or damage of shipments with the purchaser's local agent of the shipping firm. We will provide a copy of the original bill of lading and can provide assistance in filing your claim with the carrier.

Limited Warranty Fiberstars, Inc. warrants its fiber optic cable to be free from defects in material and/or workmanship, under normal use and service, for a period of **two years** from the date of original purchase, provided the product is installed to the specifications outlined by Fiberstars. Fiberstars, Inc. warrants its illuminators, hardware and fixtures *excluding the lamp* to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase, provided the product is installed to the specifications outlined by Fiberstars. In the event of a defect in material or workmanship during the warranty period, Fiberstars will repair or replace (at its option) your lighting system component, under the conditions of the warranty. See Limited Warranty Policies sheet for details.

Returns All returns require a Return Goods Authorization Number (RGA #). Fiberstars will not be responsible for product returned without an RGA #. Refer to Returned Goods Authorization Policies sheet for further details.

POLICIES: Returned Goods Authorizations

Get an RGA Number All returns require a Return Goods Authorization Number (RGA #). Call Fiberstars' Customer Support Department at 1-800-327-7877, ext. 300 before returning any products to get an RGA number. Fiberstars will not be responsible for product returned without an RGA number.

Expiration Date RGA numbers are good for a period of 90 days from issuance.

Minimum Restocking Charge A minimum restocking charge of 50% will be made on standard products returned in their factory sealed shipping cartons within three months (90 Days) of original shipping date. Products are not returnable for credit or exchange after 90 days.

Custom products including fiber tubing cut to length, color wheels, products that have opened cartons and/or products that have been used are not returnable.

Shipping Fiberstars is not responsible for shipping charges incurred when returning product to or from the factory. When returning any products, the RGA number must be clearly marked on each carton. Products should be returned to:

Fiberstars, Inc.
Attn: RGA # _____ (***MUST*** be on outside of box to avoid refusal)
44259 Nobel Drive
Fremont, CA 94538

Limited Warranty Fiberstars, Inc. warrants its fiber optic cable to be free from defects in material and/or workmanship, under normal use and service, for a period of **two years** from the date of original purchase, provided the product is installed to the specifications outlined by Fiberstars. Fiberstars, Inc. warrants its illuminators, hardware and fixtures *excluding the lamp* to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase, provided the product is installed to the specifications outlined by Fiberstars. In the event of a defect in material or workmanship during the warranty period, Fiberstars will repair or replace (at its option) your lighting system component, under the conditions of the warranty. See Limited Warranty Policies sheet for details.

Reimbursement Costs Fiberstars is not responsible for costs incurred when removing product to be returned for repair or for reinstallation costs after repair.

POLICIES: Limited Warranty

Fiberstars, Inc. (“Fiberstars”), warrants its fiber optic cable to be free from defects in material and/or workmanship, under normal use and service, for a period of **two years** from the date of original purchase, provided the product is installed to the specifications outlined by Fiberstars. Fiberstars warrants its illuminators, hardware, and fixtures *excluding the lamp* to be free from defects in material and/or workmanship, under normal use and service, for a period of **one year** from the date of original purchase. A Lighting System is defined as a Fiberstars Illuminator coupled with Fiberstars fiber optic cable to deliver fiber optic lighting. The use of a Fiberstars component (illuminator or fiber optic cable) with a non-Fiberstars component voids all warranties. Fiberstars components are designed to be part of a Fiberstars system. Their use with other components will affect their performance and therefore will not be under warranty.

In the event of a defect in material or workmanship during the warranty period, Fiberstars will repair or replace (at its option) the component(s) under the conditions of this Warranty. Fiberstars will do so at its expense for the cost of materials but not for shipping. **THIS REMEDY IS THE SOLE AND EXCLUSIVE REMEDY FOR ANY AND ALL CLAIMS RELATING TO ANY BREACH OF WARRANTY BY FIBERSTARS.**

LIMITATIONS, EXCLUSIONS AND OTHER RIGHTS:

- A. EXCEPT AS PROVIDED HEREIN, FIBERSTARS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED. Some states do not allow the exclusion of an implied warranty, so the above exclusion may not apply to you.
- B. IN NO EVENT SHALL FIBERSTARS BE LIABLE FOR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF FIBERSTARS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE. THIS DISCLAIMER APPLIES DURING AND AFTER THE WARRANTY PERIOD. Some states do not allow the exclusion or limitation of indirect, incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- C. Fiberstars is not responsible for defects or malfunctions in and/or damage to Lighting Systems where a sale is specifically made without warranty. In such sales, the disclaimers of warranty and liability, set forth above, shall continue to apply.
- D. This Warranty covers normal consumer use and does not cover damage which occurs in shipment or failure with results from alteration, accident, theft, misuse, abuse, abnormal use, negligent installation, improper maintenance or where adequate care has not been taken to prevent ice or snow damage to the Lighting System.
- E. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

If you discover a defect or malfunction during the period to which this Warranty applies, write or phone Fiberstars for information on receiving warranty service. Please address your inquiries to:

Fiberstars, Inc.
Warranty Service/Customer Support
Commercial Lighting Division
44259 Nobel Drive
Fremont, CA 94538 USA
1-800-327-7877 ext#300

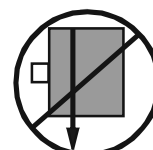
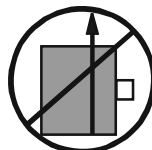
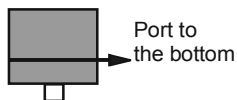
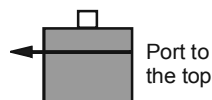
Illuminator Mounting

All Illuminators

- Minimum clearance of 24" (on all sides except bottom) and must have sufficient ventilation.
- Must be accessible for relamping and maintenance.
- All illuminators can be mounted horizontally on a flat surface.
- Some can be mounted vertically in the recommended positions below (arrow indicates air flow).
- FS1L and 602 can only be mounted horizontally on a flat surface.

FS7L, FS11L, FS12L, FS13L Illuminators

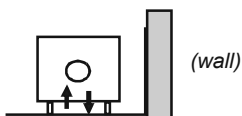
Mount illuminators either: 1) horizontally on a flat surface, or 2) vertically on a wall (refer to diagrams).



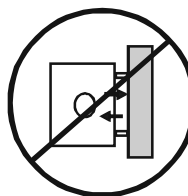
For FS7L only; FS11L, FS12L & FS13L can be mounted port right.

404N Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) horizontally to a vertical surface (refer to diagrams).

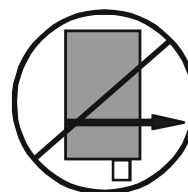
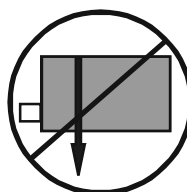
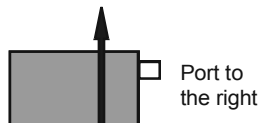
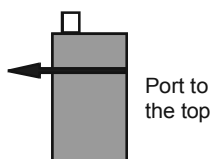


Side view from
port side with
"L" brackets



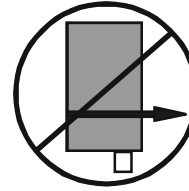
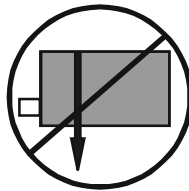
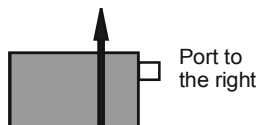
405N Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) vertically on a wall (refer to diagrams).



601 Illuminators

Mount illuminators either: 1) horizontally on a flat surface, or 2) vertically on a wall (refer to diagrams).



Porting Instructions

1. Pre Heat the Hot Knife

Plug in or ignite the hot knife (#FS-118, FS-163, or LB-HK-3). Hold or prop the knife vertically so the blade tip is up. Allow it to heat for 8 - 10 minutes.

2. Assemble the Optical Port

Zinc Port

Screw the compression fitting onto the back of the zinc port.

Select a ferrule tip and slide it into the port, using the keyway to align.

Small Ferrule = up to 100 fibers
Medium Ferrule = up to 200 fibers
Large Ferrule = up to 300 fibers
XLarge Ferrule Options: 400, 450, 600

(Special applications. See illuminator sections.)

Plastic Port

Select a ferrule tip and slide it into the port, using the keyway to align.

Small Ferrule = up to 100 fibers
Midsize Ferrule = up to 150 fibers
Medium Ferrule = up to 200 fibers
Large Ferrule = up to 300 fibers

Slide cutting cap over the ferrule.

If using 501 port, slide the black boot over the fiber tubing so the opening faces the ends of the fiber tubing.

Aluminum Port

Select a ferrule tip and slide it into the port. Secure it with the setscrew.

Small Ferrule = up to 100 fibers
Medium Ferrule = up to 211 fibers
Large Ferrule = up to 300 fibers

3. Strip Off the Outer Tubing

About 9" from each end, score around the circumference of the tubing so that it cuts the tubing but not the fibers.

Important: do not nick or cut the fibers. Pull off the outer tubing.

If using BritePak® or SuperStars® fiber optic cable, unwind the mylar wrap and cut off. Loosen the fibers thoroughly from the cabling by rubbing/rolling the fibers between your palms so that they are loose and straight.

4. Insert the Fibers into the Optical Port

Push fibers through the large end of the optical port. Rotate the port to help feed the fibers through easier. The edges of the outer tubing should wedge against the inside of the port where it begins to narrow. The fibers should extend 3" - 4" beyond the ferrule. *Caution: do not break or crimp fibers.*

5. Clamp the Fiber Tubing

Zinc Port

Insert dummy plug if needed to take up extra space. Tighten the compression fitting to apply pressure on the tubing to hold it in place.

Plastic Port

Partially screw down clamp. Use the dummy plugs or spacers to take up extra space. Tighten the screws so the clamp applies pressure on the tubing to hold it in place.

Aluminum Port

Partially screw down clamp. Use the dummy plugs to take up extra space. Tighten the screws so the clamp applies pressure on the tubing to hold it in place.

6. Stuff the Ferrule Tip

With scissors or Fiskars®, cut off about 2" of loose fibers. Stuff the ferrule tip around the edge with these fibers until no space remains between the fibers. This will help prevent the fibers from pulling back or melting.

7. Cut the Fibers with the Hot Knife

Note: This step is critical.

Place the preheated hot knife blade with the cutting edge against the ferrule tip or cutting cap. The top of the blade should tilt slightly away, about 2°. With downward pressure, cut through the fiber bundle. As you cut, rotate the port slowly. Do not saw back and forth. When properly heated, the hot knife should take 10 - 15 seconds to cut the fibers. The fiber ends should look clean and flat. Uneven cuts, debris, or the oil from your fingers will diminish the light output. Once cut, do not touch the fiber ends with your fingers.

(For plastic port, remove the cutting cap.)

8. Insert the Finished Optical Port into the Illuminator

GROUP RE-LAMPING

A group re-lamping program is extremely important to ensure the integrity of fiber optic lighting projects.

- **In an end-emitting application (i.e. downlights) group re-lamping is crucial to ensure consistent light output from all downlights in an area.** Lamps must be replaced in all illuminators at the same time. If the lamps are replaced on an “as needed” basis, some groups of downlights will appear brighter and/or a different color than other groups of downlights.
- **The situation is even more noticeable with a side-emitting application (i.e. neon replacement).** For example, if you have a lamp failure in one illuminator on a run of fiber that is fed from two illuminators and only the failed lamp is replaced; your fiber run could be noticeably brighter at one end than at the other. To avoid this situation, group re-lamping is the solution.
- **Group re-lamping should take place at 80% of manufacturer’s rated lamp life.** A percentage of the working lamps replaced should be kept. These lamps would be used for any early failures and should last until the next scheduled re-lamping.
- **If lamps are burned beyond rated life, light output diminishes** while energy consumption and risk of rupture increases. Metal halide lamps are constructed of an outer bulb with an internal arc tube made of quartz. The arc tube operates under high pressure at very high temperatures. The arc tube and the outer bulb may unexpectedly rupture due to internal causes or external factors.
- **Continuous operation can lead to unexpected lamp rupture.** Since Fiberstars’ 404N, 405N, 601, and 602 illuminators use metal halide lamps, we recommend that in continuously operating systems (24 hours/day, 7 days/week), turn lamps (illuminators) off once per day for at least one hour. Failure to comply increases the chance of rupture. Please include this recommendation on all projects that are specified with Fiberstars fiber optic lighting systems.
- **Without a re-lamping program, projects have a tendency to deteriorate.** Low light and/or uneven output will result in complaints, which will lead to customer service calls. The bottom line is that Fiberstars and fiber optic lighting in general will be viewed in a negative light.

Please encourage your specifiers and end users to utilize a group re-lamping program. This will keep all Fiberstars projects working to their maximum potential, which will keep the customer satisfied.

Troubleshooting Guide

Fiber optic cable not as bright as when first installed

- Check lamp and re-lamp if necessary.
- Fiber optic cable has pulled back out of port. Replace to focal point.
- Inspect fiber cut at port. If multi-strand fiber doesn't have a honeycomb-like look, then re-port. If fiber looks melted or discolored, re-port.

Fiber optic cable has melted

- Check to make sure fan is working.
- Check to make sure illuminator is installed to specifications in installation manual.
- Be sure fiber port is cleaned before re-porting. IPA alcohol can be used to clean port.
- Recut fiber optic cable at least 8-10 inches behind melted fiber following instructions in installation manual.

Illuminator will not come on

- Check wiring for input voltage.
- Check circuit breaker.
- If color wheel and fan come on, lamp may need to be changed.
- If a lamp is having trouble starting, it is near the end of its life. Replace lamp.
- Make sure lid is closed completely in order to make contact with the limiting switch.

Illuminators will not sync with each other

- Check low voltage wiring. Make sure no wires are crossed or shorted.
- 9V battery test: take the battery to the low voltage wires out of the back of the slave illuminator. Connect the black wire to the negative side of battery. Connect the red and green wire to the positive side of battery. Apply power to the illuminator and the color wheel should rotate. If it does not, contact factory. (This test does not work with master illuminator.)

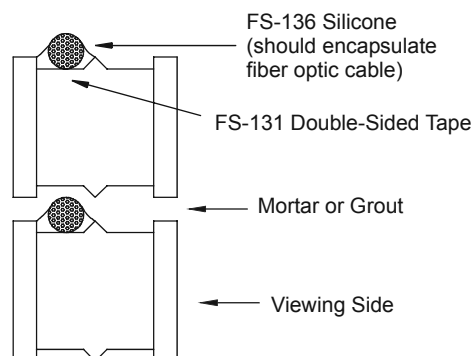
Illuminator comes on for 5-15 minutes, then turns off

- Check lamp, it may be at the end of life. Replace lamp.
- Check fan when illuminator turns on. If the fan has stopped, the illuminator is overheating. Refer to installation manual for mounting requirements.
- If illuminator is overheating, the thermal cutoff may need to be replaced.

Color wheel will not rotate

- Check color wheel to insure the progress is not impeded.
- Check wiring to switch to insure a good electrical path is present.
- Make sure the color wheel is securely attached to the color wheel motor shaft by tightening the locknut and the Loctite dab is intact.

Glass Block Installation



Note: Diameter of fiber must accommodate glass block clearance.

Mortar Joint Method (Between Mortar Joints)

Mount fiber optic cable directly between glass blocks. Use glass block without edge coating. If you do select a glass block that has edge coating, it must be removed to allow light transmission.

Tack fiber optic cable to the top of the row of glass block with hot glue to hold it in place and create a straight line along the top of the block. Run a heavy bead of Fiberstars silicone adhesive (FS-136) on both sides of fiber optic cable. Apply mortar to joint and set the block.

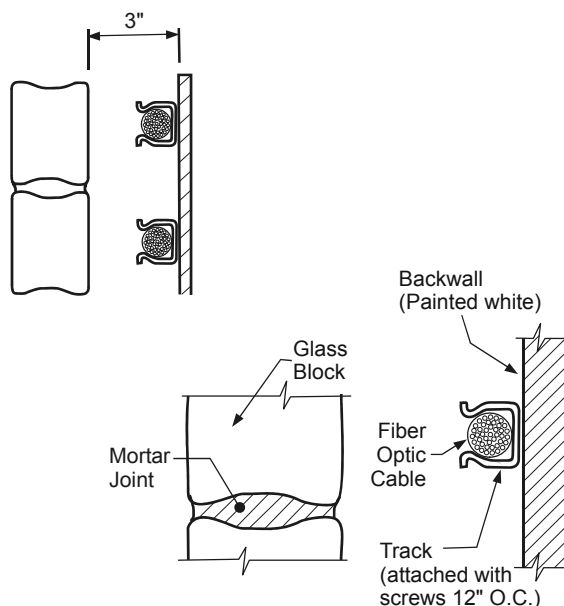
On the ends of the glass block wall, a channel will have to be created to hide the fiber optic cable where it passes from course to course. This channel must be a minimum of 2" deep to avoid kinking the fiber optic cable.

Backlit Method (Behind Glass Blocks)

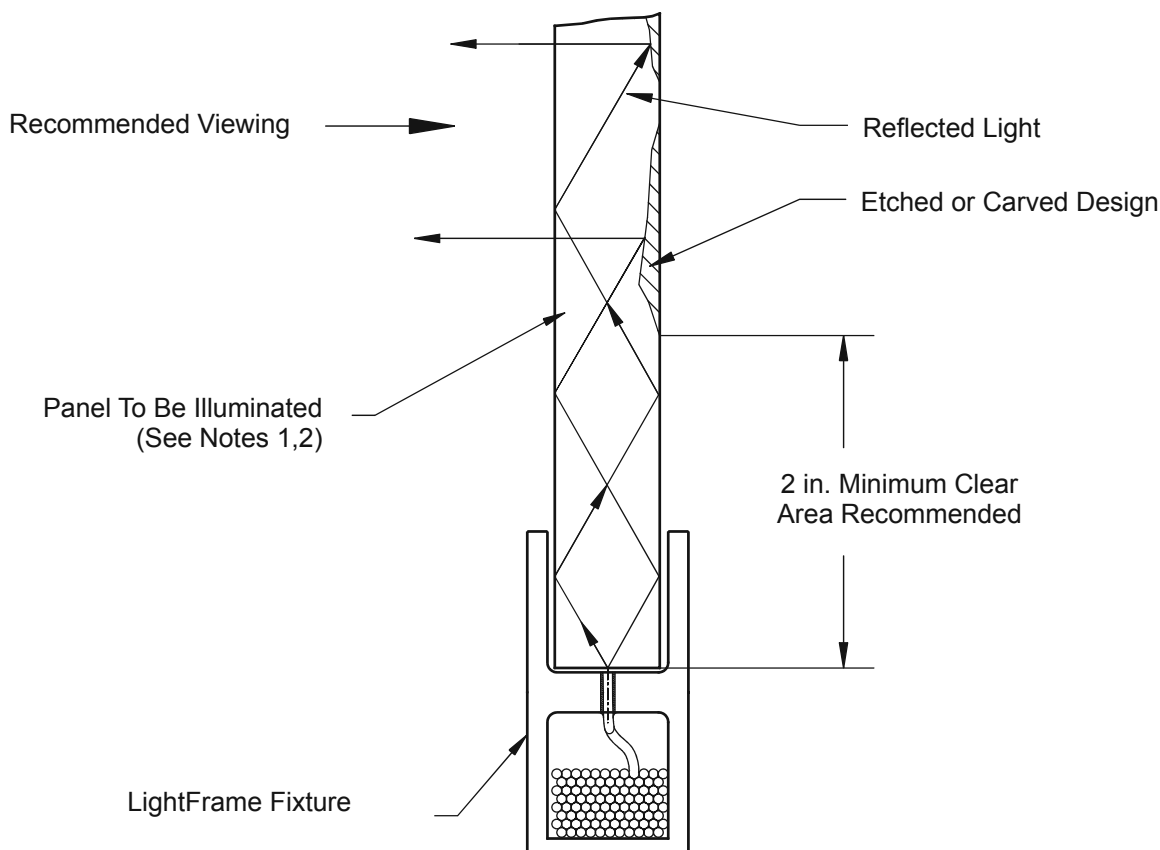
Paint background white.

Install track and fiber optic cable 3" - 6" behind glass blocks on white background at the midpoint of each course of glass block. Using adhesive and screws, install track as straight as possible.

Run a bead of adhesive inside the track to help keep the fiber optic cable in place. Press the fiber optic cable into the track, being careful not to kink or bend the fiber optic cable more than a 2" bend radius. Do not use cap.



Edge Lit Glass Installation

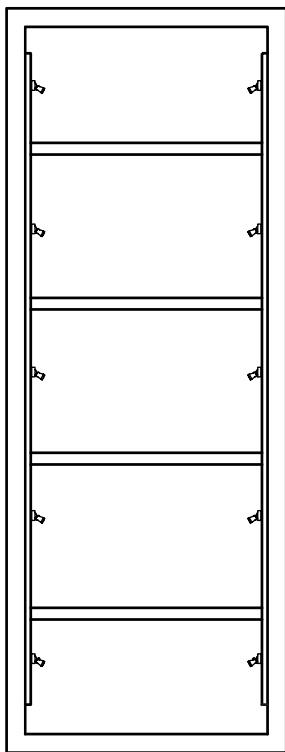


**Section View Thru
Fixture & Panel**

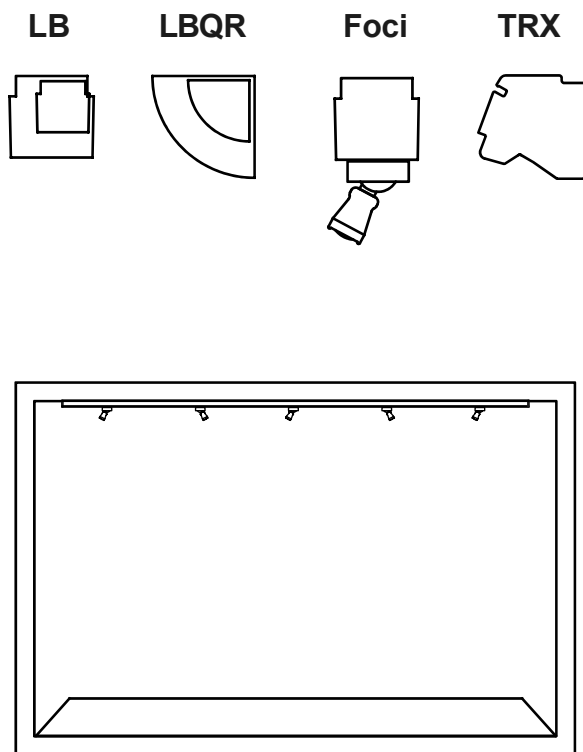
NOTES:

1. **(Very Important)** Glass shall support fixture--fixture cannot support glass
2. Glass edge in contact with LightFrame fixtures must be polished or clean break.
3. Acrylic edge in contact with LightFrame fixtures must be polished clear.
4. Install illuminator in vented location within 30 feet of illuminated panel.

Display Case Installation



Tall Case
Vertical Fixture Orientation (Sides)

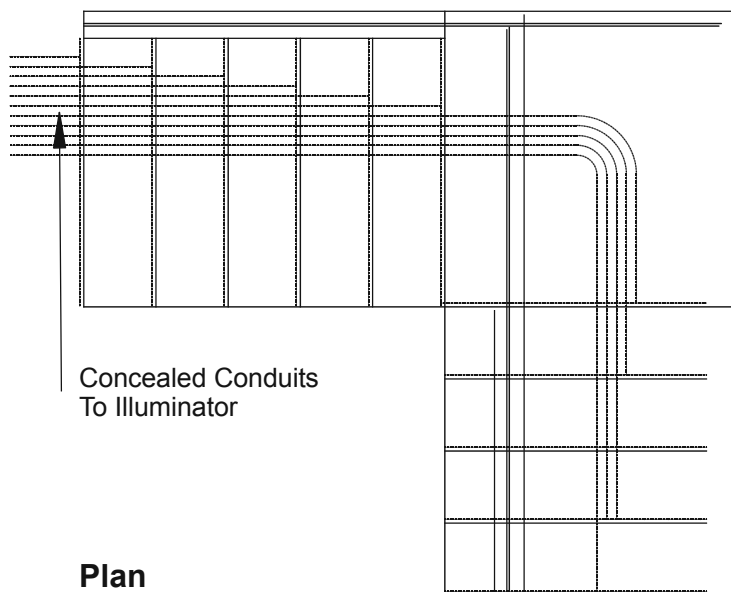


Long Case
Horizontal Fixture Orientation (Top)

NOTES:

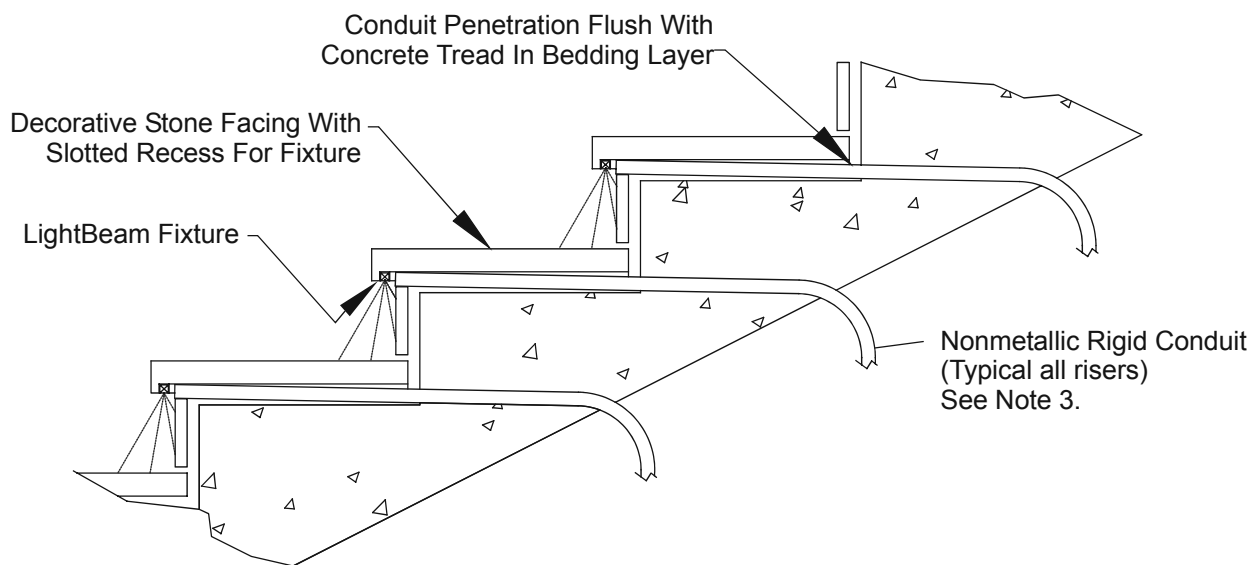
1. Attach fixtures with adjustable LB-MB brackets using threaded fasteners and/or VHB type adhesive.
2. Refer to fixture-cable dimensions to determine bend radius of feed Cable.
3. Install illuminator in vented location within 30 feet of illuminated panel.

Stair Riser Lighting Installation



NOTES:

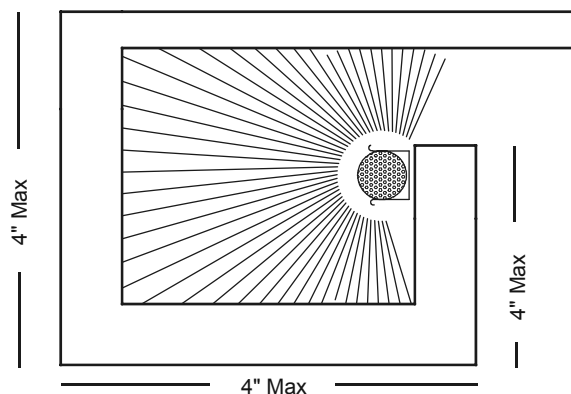
1. Attach fixtures with high performance silicone adhesive (GE IS808) or equivalent.
2. Install illuminator in ventilated location, within 30 feet of stairway.
3. All conduit bends to be sweep type fittings.



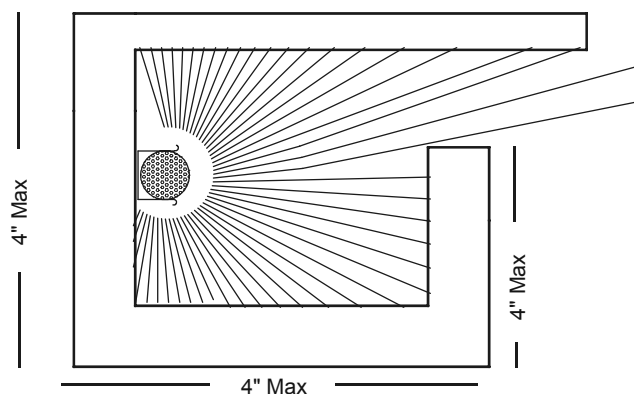
Elevation (Section)

Cove Lighting Installation

Cove Installation - Cove Glow Illumination



Cove Installation - Ceiling Glow Illumination



Secure track or mounting clips to cove wall with screws (maintain height below viewing angle). Snap BritePak-III® fiber optic cable into track, or LightBeam™ to the mounting clips. Run fiber optic cable ends to illuminator.

Note: When used in a cove, fiber optics will enhance an architectural detail but will not illuminate a room.

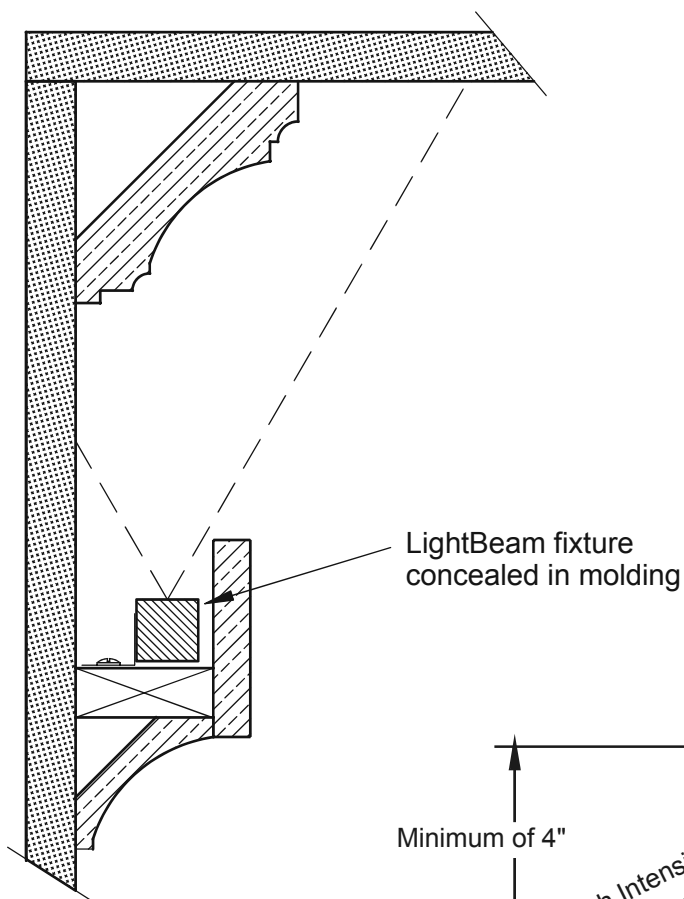
Guidelines for using BritePak® in a cove

1. Runs should not exceed 50' between illuminators.
2. Cove interior should be painted gloss white for the best reflective value.
3. Fiber should be installed as high in cove as possible without being seen from viewing area.
4. Installing two runs of fiber optic cable side by side will increase light output.
5. This option is only recommended in low ambient light conditions to create a "glow" in small dimensioned coves.

Guidelines for using LightBeam™ in a cove

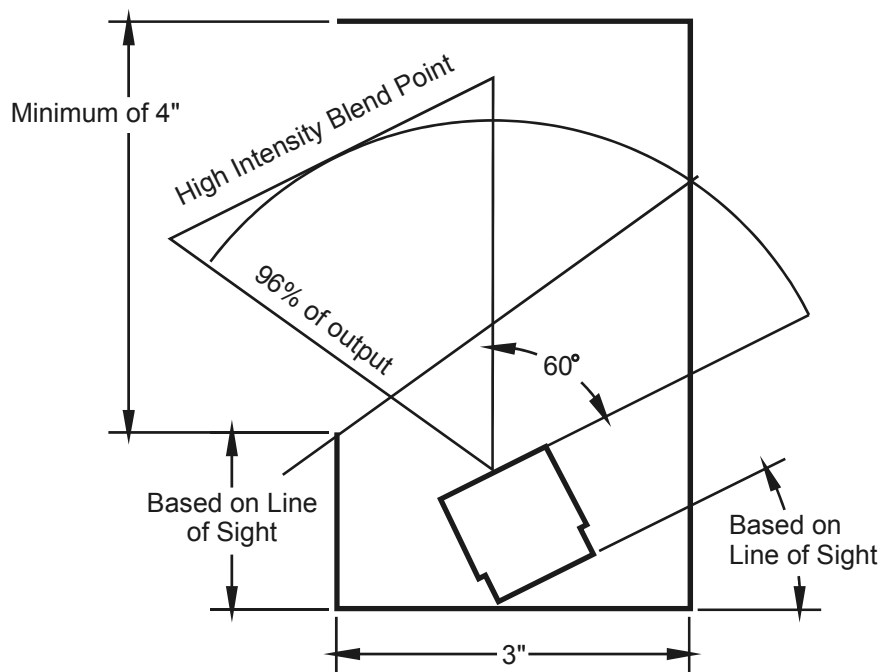
1. The first reflective surface should be 4" from the lighted face of a high intensity LightBeam.
2. The first reflective surface should be 6" from the lighted face of a medium intensity LightBeam.
3. Attach LightBeam fixtures with optional brackets and wood screws.
4. Install illuminator in ventilated location, within 30 feet of fixture.
5. Recommended for use in small and medium coves.

Cove Lighting Installation (continued)



NOTES:

1. Attach LightBeam fixtures with optional brackets and wood screws.
2. Install illuminator in ventilated location, within 30 feet of fixture.



The first reflective surface should be:
 4" from the lighted face of a high Intensity LB
 6" from the lighted face of a medium Intensity LB

Star Ceiling Applications

The "Star Ceiling" effect is a frequently requested Fiberstars application. There are too many factors that rely on personal aesthetic choices to give an exact formula for every application. That is why we have created three different "Star Ceiling Kits." **Star Ceiling Kit A** (300 stars) will cover an area from 30 to 140 sq ft depending on star density with a sparkle wheel effect; **Star Ceiling Kit B** (500 stars) will do the same, but also includes a "shooting star" effect, and **Star Ceiling Kit C** (800 stars) will cover larger ceilings, from 100 to 400 sq ft, also with a "shooting star" effect (see spec sheets for details). General guidelines as follows :

How to Achieve the Effect

The "stars" are created by using individual strands of various sizes of multi-strand fiber in our STAR34/50 cable. These strands are threaded through the ceiling material to produce tiny bright points of lights. The fibers are then glued (with #FS-115 epoxy or FS-136 silicone) into place from the concealed side of the ceiling.

Star Size and Saturation

- Small = .75 mm fiber
- Medium = 1.0 mm fiber
- Large = 1.5 mm fiber
- 1 - 6 "stars" per square foot (depending on the effect desired)

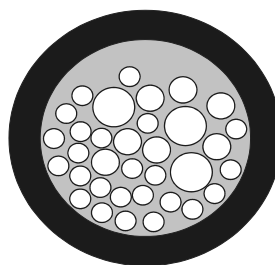
Special Effects

- A sparkle wheel is included in each kit's illuminator.
- Star Ceilings Kits B & C also include a "shooting star" effect.

Notes

- For custom star and effect ceilings contact our D/E/Q department at 1-877-777-7389.

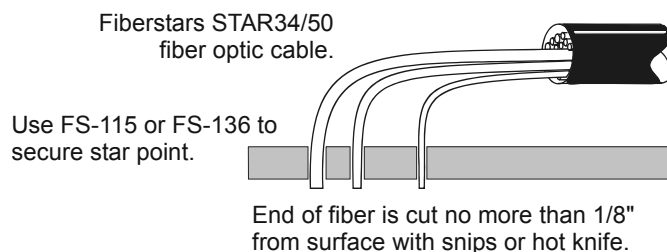
STAR 34/50



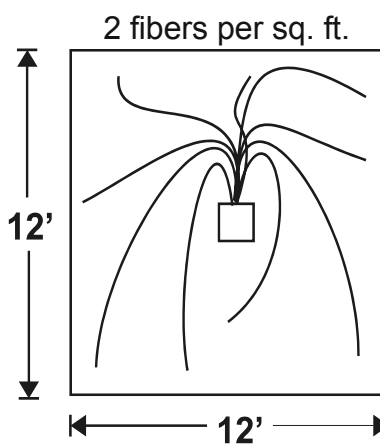
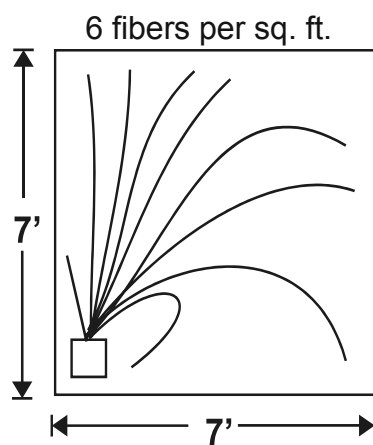
STAR34/50 contains:

- 24 - .75mm strands
- 7 - 1.0mm strands
- 3 - 1.5mm strands

Detail



Plan View Star Kit A



Specification Registration

Submitted by (Name/Agency) _____
 Project Name _____
 Project Address _____
 City/State/Zip _____
 Phone # _____

Specification Location

Contact/Title _____
 Architect _____
 Engineer _____
 Lighting Designer _____

Purchasing Location

Distributor _____

Shipping Location

Ship To Location _____
 Contractor _____

Primary Bill of Materials

Quantity	Part Number	Description

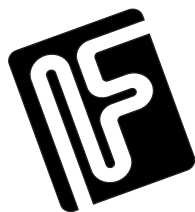
Approx. Date Specs will be out _____ Approx. Bid Date _____

Approx. Shipping Date _____ Approx. Project Completion Date _____

Please Check One: ☐ One Time Job ☐ Permanent Specification ☐ National Account

Important: Specification credit will be allowed only if specification registration is received by Fiberstars, Inc. prior to our receipt of release for shipment.

FACTORY USE ONLY					
Spec Rep #		Copies to		Date Received	
Order Rep #		Recorded by		Date	
Ship Rep #		Confirmations sent		Date	



FIBERSTARS®

Fiber Optic Technology in Lighting™

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