TOKISTAR Exhibitor

TOKISTAR LIGHTING

Exhibitor™

Tokistar® Exhibitor Series is a wet-location festoon lighting system used in amusement parks, shopping centers, street decorations and promenades. Exhibitor fixtures may also be incorporated into signs or surface mounted to accent rooflines and other architectural features.

The EXC Series incorporates Exhibitor Series into a 2" x 2" aluminum profile suitable for painting and use in all environments. This series can be wired for single circuit or chasing effects.

A wide selection of LEDs allow you to create a system to complement any theme, setting or ambient light level.

Light sources include our new Virtual Incandescent™ and Ultra Bright LEDs. We also offer 0.48 watt LEDs in a variety of colors.

Exhibitor festoon lighting spans large areas of open-air space.

EXC Series wired for four-channel chase dramatically highlights the contours of this casino perimeter.

Contents

Cover:
Exhibitor with LEDs
along the River Thames.

Design: JK Design Group

Exhibitor fills this open-air space with a spectacular canopy of light.

Virtual Incandescent™ LED
1.8 watts /24 VAC

Virtual Incandescent LEDs do a remarkable job of emulating traditional incandescent lamps.

Dollywood Theme Park, Photo Courtesy of Bandit Lites

Exhibitor adds a canopy of lights and interest to this open ceiling.

Ultra Bright LED
1.8 watts /24 VAC

These LEDs have the same apparent brightness as 7.5 watt xenon lamps, with over 4 times the life rating.

Lighting Design: Illumination City Environment (ICE)

Exhibitor with our Virtual Incandescent LEDs draws attention to this carousel.

G-19   G-14   S-14

Three Exhibitor Globe Shapes
All styles are available in clear and frosted.
The G-19 is also available in transparent
Green, Amber, Blue, Red and Violet.

Design Guidelines

Socket Spacing

Consider line of sight and viewing perspective when deciding on socket spacing. More distant spacings (18"-24") are the best choice for most festoon applications. Closer spacings (6"-12") are appropriate for applications at closer viewing range. Any custom spacing is available on request.

Light Sources

0.48 Watt LEDs

With incredible life ratings, all Tokistar LEDs are ideally suited for continuous operation in commercial applications. LEDs rated at 0.48 watts provide a softer lighting effect and are the most energy-efficient choice. These LEDs consume so little energy they can span much greater distances from a single feed point.

0.48 Watt LEDs				
Part#	Watts/Volts	Hours	Lumens	Color
EX-WW	0.48 Watts / 24 VAC	40K - 50K	12.5	2500K
EX-WH	0.48 Watts / 24 VAC	40K - 50K	8.0	5500K
EX-BL	0.48 Watts / 24 VAC	40K - 50K	1.4	Blue
EX-GR	0.48 Watts / 24 VAC	40K - 50K	4.6	Green
EX-OR	0.48 Watts / 24 VAC	40K - 50K	2.5	Orange
EX-PL	0.48 Watts / 24 VAC	40K - 50K	3.8	Purple
EX-RD	0.48 Watts / 24 VAC	40K - 50K	2.6	Red
EX-YG	0.48 Watts / 24 VAC	40K - 50K	8.0	Yellow-Green

LEDs Shown with Frosted Globes

Warm White Part# EX-WW
White Part# EX-WH
Blue Part# EX-BL
Green Part# EX-GR
Orange Part# EX-OR
Purple Part# EX-PL
Red Part# EX-RD
Yellow-Green Part# EX-YG

Virtual Incandescent and Ultra Bright LEDs

Virtual Incandescent™ LEDs do a remarkable job of emulating traditional incandescent filaments. Ultra Bright LEDs do the same, while providing a brighter light source. Both LEDs are rated at 1.8 watts.

Ultra-Bright LED

Virtual Incandescent™ LED

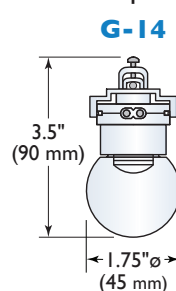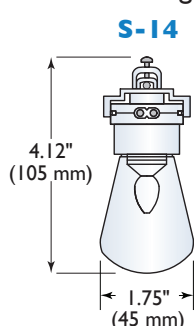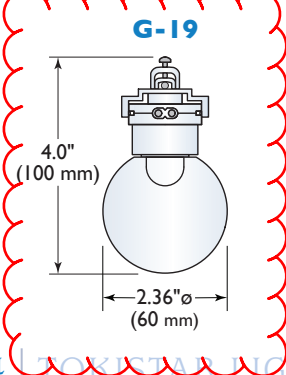| Ultra Bright and Virtual Incandescent LEDs				
Part#	Watts/Volts	Hours	Lumens	Color
EX-UB-LW	1.8 Watts / 24 VAC	40K - 50K	41	2000K
EX-UB	1.8 Watts / 24 VAC	40K - 50K	45	2400K
EX-VI-LW	1.8 Watts / 24 VAC	40K - 50K	36	2000K
EX-VI	1.8 Watts / 24 VAC	40K - 50K	40	2400K

Xenon Lamp

Tokistar's Exhibitor Series was originally introduced with incandescent xenon lamps, and we still offer them as an option. Due to the efficiency and exceptional life of LED sources, xenon lamps are no longer the most popular choice.

Xenon Lamp				
Part#	Watts/Volts	Hours	Lumens	Color
EX-124	7.5 Watts / 24 VAC	10K	65	2500K

Globe Selection

Three different shapes are available: G-19, G-14 and S-14. Clear globes have excellent clarity and will emphasize distinct points of light. Frosted globes diffuse light and have a softer appearance. Each globe includes two O-rings for a secure and weatherproof seal to the socket. G-19 transparent colored globes create vibrant color. Virtual Incandescent LEDs are not recommended for use with frosted globes, and our xenon lamp is not for use with G-14 globes.

G-19
4.0" (100 mm)
2.36"ø (60 mm)

S-14
4.12" (105 mm)
1.75" (45 mm)

G-14
3.5" (90 mm)
1.75"ø (45 mm)

G-19 globes are also available in transparent Green, Amber, Blue, Red and Violet.

How to Specify

When specifying an Exhibitor Lighting System, take into consideration:
Socket Spacing, LED Style and Globe Selection.

The Basic System

The Exhibitor Series consists of sockets permanently sealed to flexible cable.
All components are rated for wet location use.

EX<u>BK</u> - <u>6</u> - <u>VI</u> - <u>S14</u> - <u>C</u>

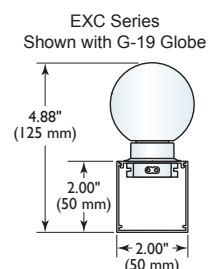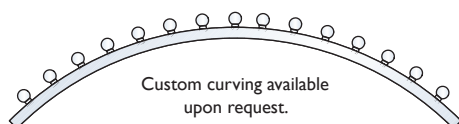| Cable / Socket Color		Socket Spacing		LED			Globe Style		Globe Color	
Code	Color	Code	Inches (mm)	Code	Color	Watts/Volts	Code	Style	Code	Color
BK	Black	6	6" (150 mm)	UBLW	2000K White	1.8 W / 24 VAC	G19	G-19	C	Clear
WH	White	12	12" (300 mm)	UB	2400K White	1.8 W / 24 VAC	G14	G-14	F	Frosted
		18	18" (450 mm)	VILW	2000K White	1.8 W / 24 VAC	S14	S-14	G	Green
		24	24" (600 mm)	VI	2400K White	1.8 W / 24 VAC			A	Amber
							G-14 & S-14 in		B	Blue
		Custom spacing		Virtual Incandescent (VILW & VI) not for use			clear and		R	Red
		is available.		with Frosted Globes			frosted only		V	Violet
				WW	2500K White	0.48 W / 24 VAC			M	Multi-Color
				WH	5500K White	0.48 W / 24 VAC				
				BL	Blue	0.48 W / 24 VAC				
				GR	Green	0.48 W / 24 VAC				
				OR	Orange	0.48 W / 24 VAC				
				PL	Purple	0.48 W / 24 VAC				
				RD	Red	0.48 W / 24 VAC				
				YG	Yellow-Green	0.48 W / 24 VAC				
				(Any Combination of 0.48 Watt Colors is Possible)						
				Xenon Lamp						
				124	2500K	7.5 W / 24 VAC				
				Xenon lamp not for use with G-14 globes						

EXC Series

EXC Series incorporates Exhibitor Series into a 2" x 2" satin aluminum profile for use in all environments.
Custom finishes are available upon request. Fixtures can be wired for single circuit or chasing effects.

<u>EXC</u> - <u>6</u> - <u>UB</u> - <u>G19</u> - <u>F</u>

Extrusion Finish		Socket Spacing		LED			Globe Style		Globe Color	
Code	Color	Code	Inches (mm)	Code	Color	Watts/Volts	Code	Style	Code	Color
EXC	Satin Aluminum	6	6" (150 mm)	UBLW	2000K White	1.8 W / 24 VAC	G19	G-19	C	Clear
		12	12" (300 mm)	UB	2400K White	1.8 W / 24 VAC	G14	G-14	F	Frosted
		18	18" (450 mm)	VILW	2000K White	1.8 W / 24 VAC	S14	S-14	G	Green
		6C	6" Chase (150 mm)	VI	2400K White	1.8 W / 24 VAC			A	Amber
		12C	12" Chase (300 mm)				G-14 & S-14 in		B	Blue
				Virtual Incandescent (VILW & VI) not for use			clear and		R	Red
		Custom spacing		with Frosted Globes			frosted only		V	Violet
		is available.							M	Multi-Color
				WW	2500K White	0.48 W / 24 VAC				
				WH	5500K White	0.48 W / 24 VAC				
				BL	Blue	0.48 W / 24 VAC				
				GR	Green	0.48 W / 24 VAC				
				OR	Orange	0.48 W / 24 VAC				
				PL	Purple	0.48 W / 24 VAC				
				RD	Red	0.48 W / 24 VAC				
				YG	Yellow-Green	0.48 W / 24 VAC				
				(Any Combination of 0.48 Watt Colors is Possible)						
				Xenon Lamp						
				124	2500K	7.5 W / 24 VAC				
				Xenon lamp not for use with G-14 globes						

Custom curving available
upon request.

EXC Series
Shown with G-19 Globe

4.88"
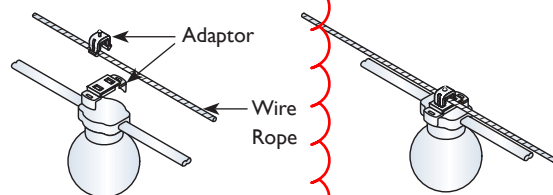(125 mm)

2.00"
(50 mm)

2.00"
(50 mm)

Mounting Options

Festoon Mounting

Part# EX-MDA-WH (White)
Part# EX-MDA-BK (Black)

For festoon applications to a catenary cable, our wire-rope adaptors securely hold each socket in place to a 1/16" or 1/8" diameter wire rope. Wire rope and all of its associated mounting hardware is not provided with the system.
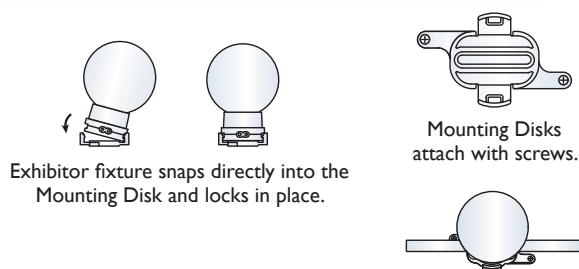
Adaptor

Wire Rope

Surface Mounting with Disks

Part# EX-MD-WH (White)
Part# EX-MD-BK (Black)

Exhibitor Series can be surface mounted to structures using mounting disks. One disk is required for mounting each socket. The socket can be snapped into the disk first, and the entire assembly screwed in place to the structure.
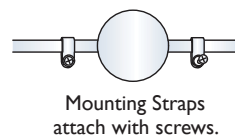
Exhibitor fixture snaps directly into the Mounting Disk and locks in place.

Mounting Disks attach with screws.

Surface Mounting with Straps

Part# EX-MS-WH (White)
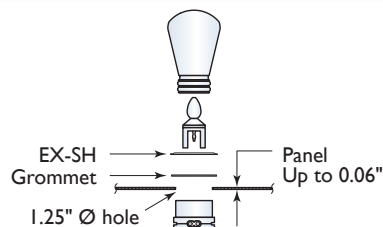**Part# EX-MS-BK (Black)**

Exhibitor Series may be surface mounted to structures using our mounting straps. Two straps are required for mounting each socket. Straps are positioned on either side of the socket, and then screwed securely to the structure.

Mounting Straps attach with screws.

Panel-Extrusion Mounting

Part# EX-SH

For installations to flat panels or extrusions up to 0.06", we offer stainless-steel panel fasteners. The socket assembly is inserted from below, then the panel fastener and grommet are pressed in place from above.
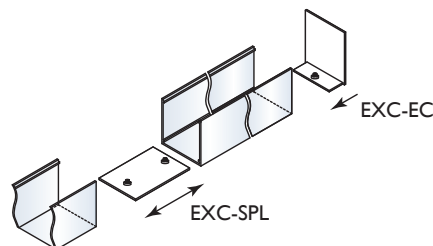
EX-SH Grommet

Panel Up to 0.06"

1.25" Ø hole

EXC Series

Part# EXC-SPL (Exhibitor Splice)
Part# EXC-EC (Exhibitor End Caps)

End Caps are required at the end and beginning of each run of fixture. When EXC fixtures are positioned end-to-end, a splice is needed to seam them together.
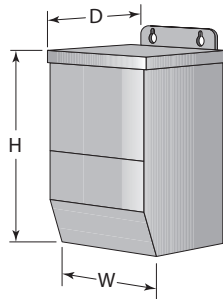
EXC-EC

EXC-SPL

Sizes and Lengths

To minimize voltage drop and keep conductors safely within their ratings, do not exceed the maximum lengths shown for each independent fixture.

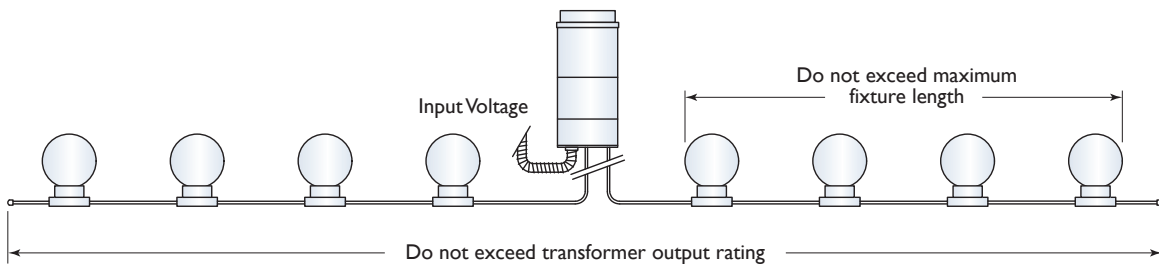|	Maximum Run Lengths		
	LEDs	UB & VI LEDs	Xenon Lamp
Socket Spacing	0.48 Watt / 24 VAC	1.8 Watt / 24 VAC	7.5 Watt / 24 VAC
6" (150 mm)	250' (76 M)	125' (38 M)	32' (10 M)
12" (300 mm)	350' (106 M)	200' (60 M)	56' (17 M)
18" (450 mm)	420' (128 M)	225' (68 M)	72' (22 M)
24" (600 mm)	500' (152 M)	250' (76 M)	80' (24 M)

Transformers

Tokistar transformers operate from a 120 VAC / 60 Hz input and are fully dimmable. They are provided in a Nema 3R enclosure suitable for wet locations. The secondary outputs are protected by circuit breakers. Transformers should be installed in an accessible location where there is free air circulation.

24 VAC Transformers					
Number	Outputs	D	H	W	Weight
C2-40-24V	1 @ 40 Watt / 24 VAC	2.25"	5.75"	2.25"	2 lbs
C2-96-24V	1 @ 96 Watt / 24 VAC	2.5"	6.5"	3.0"	3 lbs
T24-150	1 @ 150 Watt / 24 VAC	3.0"	9.0"	3.0"	5 lbs
T24-300	1 @ 300 Watt / 24 VAC	3.5"	9.5"	4.5"	8 lbs
T24-600	1 @ 600 Watt / 24 VAC	4.5"	10.5"	4.5"	15 lbs
T24-1200	2 @ 600 Watt / 24 VAC	5.0"	11.5"	7.0"	28 lbs

Consult factory for transformers with input voltages of 230 or 277 VAC. Sizes and weights shown are approximate and subject to change without notice.

Transformers can be centrally located and feed fixtures in either direction.

Input Voltage

Do not exceed maximum fixture length

Do not exceed transformer output rating

Specifications

All plastic components comply with UL746C in respect to Ultraviolet Light and Water Absorption testing.

Light Sources include LED and Xenon lamps

Polycarbonate Globe with flammability rating UL 94V-2

Flexible Conductors #12 AWG stranded and plated wire

Two O-Rings on each globe for weatherproof seal

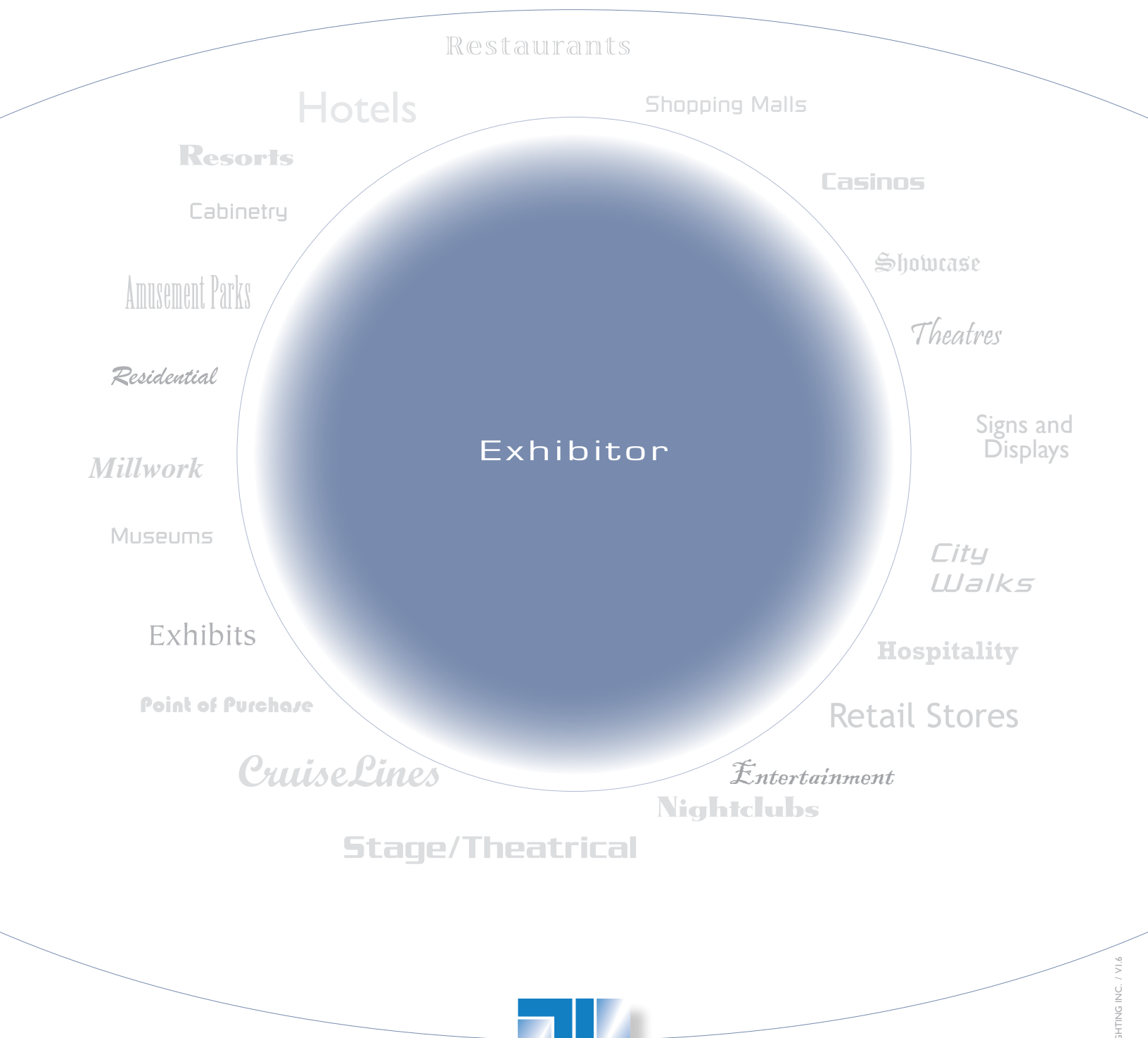**Sockets** permanently fastened to cable with sealant

Insulation is flexible PVC with flammability rating UL 94 HB

Intertek
Wet Location
Listed

Restaurants

Hotels

Shopping Malls

Resorts

Casinos

Cabinetry

Showcase

Amusement Parks

Theatres

Residential

Signs and
Displays

Millwork

Exhibitor

Museums

City
Walks

Exhibits

Hospitality

Point of Purchase

Retail Stores

CruiseLines

Entertainment

Nightclubs

Stage/Theatrical

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