ARCHITECTURAL UMBRELLAS

BIRDAIR

SPECIALTY CONTRACTING FOR TENSILE ARCHITECTURE

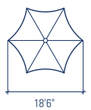
CENTRA

Birdair Architectural Umbrellas are available in a range of shapes and sizes, collapsible, portable and modular units, with color and branding potential and they can be customized to suit each site using our wide range of accessories including heating, misting and lighting.

Our umbrellas can be installed on a variety of surfaces including concrete footings and slabs, timber decks and boardwalks. These structures are easy to transport and arrive to site fully preassembled or in component form for easy erection.

Birdair Architectural Umbrellas are able to withstand strong winds with most models designed to 90mph, Exp B* as standard. They also provide maximum UVA and UVB protection, feature state of the art membranes including TiO_2 photo-catalytic membrane, galvanized and stainless steel cables and fittings. All collapsible models utilize a patented lever erection system which allows easy opening and closing of most models in seconds and there are no internal gear boxes to jam or fail.

The Centra (centre column, collapsible) range of Birdair Architectural Umbrellas are available in square, rectangular, truncated square, octagonal and hexagonal canopy shapes with models ranging between 79–325 sq. ft. Designed to 90mph, Exp B* as standard, all models include stainless steel cables and fittings, UV stabilized membrane, are delivered to site preassembled and are fully collapsible.



LEVA

The Leva (cantilever column, collapsible) range of Birdair Architectural Umbrellas are also available in square, rectangular, truncated square, octagonal and hexagonal canopy shapes with models ranging between 79–325 sq. ft.

Designed to 90mph, Exp B* as standard, the cantilevered pole allows for unimpeded use underneath the umbrella canopy. The Leva umbrella is delivered to site preassembled and is easily collapsed when connected to the cantilever pole.

* refer to collapsible design specifications on page 14

PORTA

The Porta (centre column, collapsible and portable) range of Birdair Architectural Umbrellas are square shaped and available in 47–110 sq.ft. sizes. All Porta umbrellas are available with a large base plate which allows movement from space to space, semi-permanent fixing into a pavement socket or a permanent fixing to a concrete slab. The Porta umbrella is not wind rated.

TECHNICAL DETAILS

DURABILITY

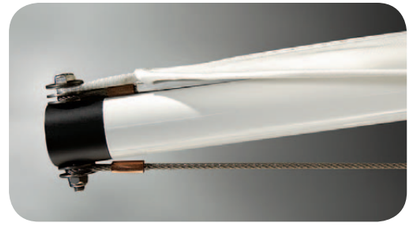
All steel frame constructions are wind-rated, commercial quality and designed to last.

CONVENIENCE

The polyvinylchloride (PVC) canopy is waterproof, UV resistant, anti-fungal, easy-clean polyvinylidene fluoride (PVDF) coating – industry leading fabric technology means long life with low maintenance.

STRENGTH

High frequency butt-joint welded canopy panels with tape reinforcing – the best industry practice for strength while providing an attractive smooth finish. Canopy perimeters are stitched using Tenara® polytetrafluoroethylene (PTFE) sewing thread unaffected by UV, salt water, acid rain, pollutants or micro-organisms.

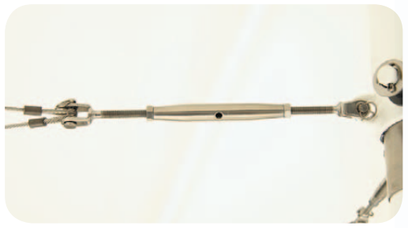


COLLAPSIBLE

With our patented lever erection system you can erect and collapse most models in seconds and there are no internal gear boxes to jam or fail.

TENSION

Marine grade 316 stainless steel under arm cables with tension adjustment ensures membrane tension can be maintained over time.



MONACO

The Monaco (centre column, non-collapsible) is modular in design. The Monaco is square in plan and conical shape and ranges between 100–1600 sq. ft. Monaco umbrellas are site assembled, fixed, typically larger than the preassembled Centra, Leva and Porta umbrellas and can be designed with linear (straight) edges and gutters. Multiple units can be linked together in one continuous membrane. Designed to 90mph, Exp C** as standard and greater if required, all models include galvanized steel cables with stainless steel fittings, UV stabilized membrane and are delivered to site in component form.


10'2"– 40'7"


10'2"–26'11"


10'2"– 40'7"

PAVILION


10'2"– 40'7"


10'2"– 40'7"

The Pavilion (corner column, non-collapsible) is also modular in design, square in plan and conical shape which range between 100–1600 sq. ft. Pavilion umbrellas are site assembled. Multiple units can be linked together in one continuous membrane. Designed to 90mph, Exp C** as standard and greater if required, the Pavilion umbrella is supported by columns at each corner and can incorporate gutters or linear (straight) edges.

** refer to modular design specifications on page 15

QUASAR

The Quasar (centre column, non-collapsible) is modular in design, square in plan and hyperbolic paraboloid shaped. Sizes range between 180–1600 sq. ft. Multiple units can be linked together as one continuous membrane and can be designed with cantilevered columns. Quasars are designed to 90mph, Exp C** as standard and greater if required including areas which experience heavy snow.

13'7" – 40'7"

ST TROPEZ

20'2" – 40'7"

The St Tropez (centre column, non-collapsible) is modular in design, square in plan and inverted conical shaped. The St Tropez's inverted conic shape directs rain water into a neatly designed hopper beneath the canopy which redirects water into the column. The St Tropez column is connected to an underground storm water pipe or water storage unit. Sizes range between 400–1600 sq. ft. and multiple units can be linked together as one continuous membrane. The St Tropez is designed to 90mph, Exp C**.

** refer to modular design specifications on page 15

CONTOUR vs LINEAR EDGE

CONTOUR EDGE

The contour edge is standard to all Monaco, Pavilion, Quasar and St Tropez models. With their sleek look, contour edge canopies suggest a feeling of lightness.

LINEAR EDGE

The linear edge provides additional coverage as well as attachment of gutters or blinds.

COLOR SELECTOR

FABRIC COLORS

PVC

White (7205)

Champagne (502–8341)

Light gray (502–2171)

Bordeaux (502–8284)

Red (502–8255)

Moss green (502–2158)

Tennis green (502–8056)

Black (502–8450)

PTFE

White (bleached)

Natural (not bleached) ^

STEEL COLORS

Paint or powder coat

White pearl (81880)

Primrose (84365)

APO gray (32786)

Claret (32774)

Ocean mist (83250)

Precious silver pearl (57225)

Classic Hawthorn green (33709)

Black satin (19268)

Galvanized

Stainless steel

The colors represented on this selector are as close to the actual color as printing methods will allow. For samples please contact your Birdair expert.
^ Note – PTFE bleaches white after approximately 6–8 weeks (depending on the UV exposure).

ACCESSORIES

COLOR

Choose from a wide range of fabric and steel color variations. (see page 11)

LINKING KITS

Streamline the umbrellas by linking them as one continuous structure creating uninterrupted weather protection.

BRANDING

All canopies are suitable for promotional branding. Combine signage with lighting to double the impact.

HEATING & LIGHTING

HeatRay® heating and Celite lighting systems by Heatray America can be factory fitted or installed on site to keep patrons warm and the covered premises bright regardless of the season.

MISTING

Celmist® evaporative cooling systems by Heatray America can be factory fitted or installed on site to keep patrons cool during the hotter seasons.

PAVEMENT SOCKETS

Suits hard or soft surfaces, for clients who need to use their structure to suit any function.

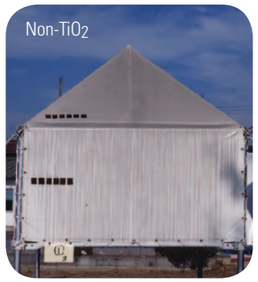
SWIVEL LEVA OPTION

Allows for full 360 degree rotation for convenient, dynamic coverage.

DOUBLE BOOM OPTION

Consider the convenience of multiple canopies from one column.

TiO_2 PHOTOCATALYTIC MEMBRANE

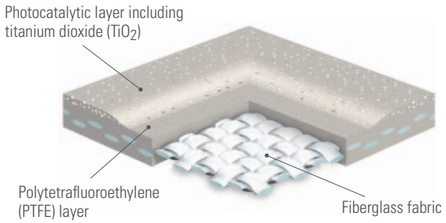


PVC coated fabric after 5 months outdoor (Saitama, Japan)

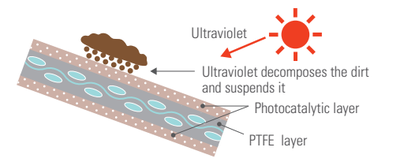
The unique self-cleaning benefits of TiO_2 allow the material to break down dirt and other organic materials through a chemical reaction with the sun's UV rays, oxygen and water vapor, present in the air.

This reaction, known as oxidation-reduction, converts these materials into harmless gases and natural components without using excess chemicals, solvents or water. The resulting sediments are simply washed away by rain. As a result, the membrane material remains bright and clean, reducing the need for frequent service.

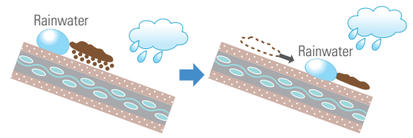
PTFE-COATED FABRIC WITH TiO_2



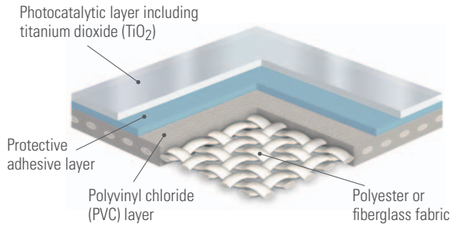
1 SUN LIGHT DECOMPOSES THE DIRT



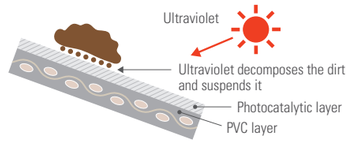
2 RAIN WASHES AWAY THE DIRT



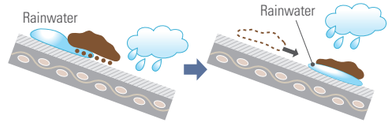
PVC-COATED FABRIC WITH TiO_2



1 SUN LIGHT DECOMPOSES THE DIRT



2 RAIN SUSPENDS AND WASHES AWAY THE DIRT

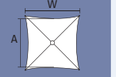


MODEL SELECTOR
COLLAPSIBLE

*DESIGN SPECIFICATIONS – COLLAPSIBLE

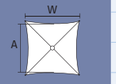
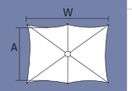
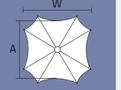
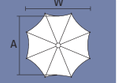
	Standard Centra/Leva	Optional Centra only
Basic wind speed V	90 mph	120 mph
Importance factor I	Category II	Category II
Exposure category	Exposure B	Exposure B
Mean roof height	20 feet	20 feet
Ground snow load, p_g	5 psf	5 psf

Porta
Portable

Canopy shape	Not wind rated Porta model no	Umbrella overall width ^ see footnote (W) ft. in.	Umbrella coverage overall sq. ft.	Minimum canopy width (A) ft. in.	Umbrella diagonal overall ft. in.	Overall height Porta (H) ft. in.	Under canopy clearance Porta (C) ft. in.	Closed arms to baseplate Porta (D) ft. in.
Square 	P21	6'10"x6'10"	47	6'8"x6'8"	9'8"	8'5"	6'7"	3'6"
	P32	10'6"x10'6"	110	9'2"x9'2"	14'8"	9'10"	6'11"	2'3"

Centra
Central support pole

Leva
Cantilever/
Side support pole

Canopy shape	90 mph std wind-rating Exp. B* Centra model no	Leva model no	Umbrella overall width ^ see footnote (W) ft. in.	Umbrella coverage overall sq. ft.	Minimum canopy width (A) ft. in.	Umbrella diagonal overall ft. in.	Overall height Centra (H) ft. in.	Overall height Leva (H) ft. in.	Under canopy clearance Centra (C) ft. in.	Under canopy clearance Leva (C) ft. in.	Closed arms to baseplate Centra (D) ft. in.	Closed arms to baseplate Leva (D) ft. in.
Square 	CS27	LS27	8'10"x8'10"	79	7'7"x7'7"	12'5"	10'6"	11'7"	7'5"	7'5"	3'11"	3'11"
	CS32	LS32	10'5"x10'5"	109	8'10"x 8'10"	14'7"	10'6"	11'9"	7'	7'5"	2'9"	2'11"
	CS38	LS38	12'3"x12'3"	150	10'4"x10'4"	17'2"	10'6"	12'2"	7'	7'5"	1'7"	2'1"
	CS40	LS40	13'4"x13'4"	177	11'1"x11'1"	18'8"	10'9"	12'	7'3"	7'5"	1'1"	1'3"
	CS45	LS45	15'x15'	226	13'1"x13'1"	21'	11'3"	12'4"	7'5"	7'5"	5"	5"
	CS50	LS50	16'7"x16'7"	275	14'10"x14'10"	23'3"	12'	13'4"	7'10"	7'10"	2"	2"
	CS54	LS54	18'x18'	325	15'8"x15'8"	25'3"	-	14'1"	-	8'6"	-	2"
Rectangular 	CR45	LR45	14'11"x10'5"	156	13'4"x9'9"	18'1"	11'	12'5"	7'	7'5"	1'6"	1'10"
	CR53	LR53	17'5"x12'4"	214	15'2"x11'	21'2"	11'4"	13'1"	7'	7'5"	4"	8"
Truncated square 	CTS43	LTS43	14'1"x14'1"	199	12'2"x12'2"	16'5"	11'	12'	7'7"	7'5"	2'6"	2'4"
Octagonal 	CO40	LO40	13'3" wide	125	11'10" wide	14'4"	9'10"	11'5"	6'11"	7'5"	2'5"	2'11"
	CO50	LO50	16'2" wide	186	14'3" wide	17'7"	11'	12'4"	7'2"	7'5"	1'9"	1'11"
Hexagonal 	CH57	LH57	18'6" wide	222	16'3" wide	21'3"	11'	12'6"	7'1"	7'5"	2"	6"

^ Note – 4 inches clearance to adjacent buildings, poles, trees etc. is required around the canopy overall size.

MODULAR

**DESIGN SPECIFICATIONS – MODULAR

	Standard Modular	Optional Modular
Basic wind speed V	90 mph	to regional spec.
Importance factor I	Category II	to regional spec.
Exposure category	Exposure C	to regional spec.
Mean roof height	20 feet	to regional spec.
Ground snow load, p_g	5 psf	to regional spec.

Umbrella model 90 mph std wind-rating Exp. C**	Canopy shape	Type & model no.	Canopy nominal size ft. in.	Canopy width (W) ft. in.	Overall height (H) ft. in.	Under canopy clearance (C) ft. in.
Monaco 	Contour edge 	MS30	10'2"x10'2"	10'2"	10'11"	7'11"
		MS40	13'8"x13'8"	13'8"	11'6"	7'11"
		MS50	16'11"x16'11"	16'11"	12'4"	7'11"
		MS60	20'2"x20'2"	20'2"	14'5"	8'10"
		MS70	23'7"x23'7"	23'7"	15'1"	8'10"
		MS80	26'11"x26'11"	26'11"	15'11"	8'10"
		MS90	30'6"x30'6"	30'6"	17'9"	9'10"
		MS100	33'9"x33'9"	33'9"	18'7"	9'10"
		MS120	40'7"x40'7"	40'7"	20'3"	9'10"
Monaco Side supported 	Contour edge 	MSS30	10'2"x10'2"	10'2"	11'10"	7'11"
		MSS40	13'8"x13'8"	13'8"	12'10"	7'11"
		MSS50	16'11"x16'11"	16'11"	14'	7'11"
		MSS60	20'2"x20'2"	20'2"	16'4"	8'10"
		MSS70	23'7"x23'7"	23'7"	17'2"	8'10"
		MSS80	26'11"x26'11"	26'11"	18'4"	8'10"
Pavilion 	Contour edge 	PS30	10'2"x10'2"	10'2"	10'11"	7'11"
		PS40	13'8"x13'8"	13'8"	11'6"	7'11"
		PS50	16'11"x16'11"	16'11"	12'4"	7'11"
		PS60	20'3"x20'3"	20'3"	14'5"	8'10"
		PS70	23'7"x23'7"	23'7"	15'1"	8'10"
		PS80	27'x27'	27'	15'11"	8'10"
		PS90	30'6"x30'6"	30'6"	17'9"	9'10"
		PS100	33'9"x33'9"	33'9"	18'7"	9'10"
		PS120	40'7"x40'7"	40'7"	20'3"	9'10"
Quasar 		QS40	13'7"x13'7"	13'7"	11'11"	7'11"
		QS50	16'11"x16'11"	16'11"	12'10"	7'11"
		QS60	20'4"x20'4"	20'4"	15'	8'10"
		QS70	23'7"x23'7"	23'7"	15'9"	8'10"
		QS80	27'2"x27'2"	27'2"	16'11"	8'10"
		QS90	30'6"x30'6"	30'6"	18'9"	9'10"
		QS100	34'1"x34'1"	34'1"	19'9"	9'10"
		QS120	40'7"x40'7"	40'7"	21'10"	9'10"
St Tropez 		ST60	20'2"x20'2"	20'2"	14'7"	9'6"
		ST70	23'7"x23'7"	23'7"	15'3"	9'6"
		ST80	26'11x26'11"	26'11"	16'2"	9'6"
		ST90	30'6"x30'6"	30'6"	18'	10'6"
		ST100	33'9"x33'9"	33'9"	18'10"	10'6"
		ST120	40'7"x40'7"	40'7"	20'5"	10'6"

BIRDAIR

SPECIALTY CONTRACTING FOR TENSILE ARCHITECTURE

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