poligon®





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Gable Roof 52x119 #55932

The Poligon® Advantage

Since 1964

Poligon is the leader in the design, engineering, and manufacturing of open air structures. From your initial design concept through the completed installation, our streamlined process makes creating the perfect structure for your site easy and efficient.

Poligon offers endless options to suit your site-specific requirements. Our experienced design and engineering teams ensure all structures are building code compliant and detailed for easy installation. Our state of the art manufacturing facility and dedicated staff fabricate each structure with the highest precision and quality in the industry. Every structure is protected in our Poli-5000 powder coat for many years of superior durability.

Expect the best.

IRCLE OF FRIENDS WITH MAJOR TREE

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Poligon[®] Process

Initial Contact - Contact your local Poligon Representative and we'll begin the discovery process. We will discuss your objectives, timelines, budgets, and most importantly what you need for your project.

Design - You can collaborate directly with our design professionals, leveraging our decades of experience to turn your design intent into a reality.

Stamped Engineering Drawings - Our in-house engineering team is able to provide structural calculations and drawings that are signed, sealed, and ready for the permitting process, saving time and additional costs.

Material Procurement & Fabrication - Framing and roofing materials procured through Poligon streamlines the process, reduces coordination issues, and progresses your project through the manufacturing stage more quickly.

All structures are manufactured in our AISC (American Institute of Steel Construction) and AWS (American Welding Society) certified facility. AISC sets the quality standard for structural steel and is the most recognized national quality certification program in the industry.



process and then inspected again prior to being carefully packaged. Finally, your shipment is sent and delivered on dedicated flatbed trucks so you never have to worry about damage along the way.

Institute (PCI) 4000 certified.

Installation - Poligon's structural steel frames bolt together and do not require field welding or cutting of steel members. In addition to eliminating bird nesting, our framing system conceals the structural hardware (bolts, nuts, etc.)

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Ongoing Support - Throughout the process, Poligon's single source responsibility improves communication and ensures that any unforeseen issues get resolved quickly and cost effectively.





Powder Coating - Finished parts receive our exclusive in-house Poli-5000[™] powder coating, the toughest most durable coating in the industry and Powder Coat





Packaging & Shipping - Components are inspected throughout the manufacturing





Customer Inspired Designs



Monoslope 20x38 #56330





Gable -Tiered 42x70 #55646



Every Poligon structure is designed specifically for your site. Creative details such as painted artwork can also be applied by others to customize the structure for your community.



Inverted Gable 49x78 w/ graphics by others #63657



Barrel Vault 10x20 #59200

Inverted Gable 58x41 #60044

Customer Inspired Designs



Monoslope 30x40 #63877







Monoslope 16x20 #64526



Gable-Tiered 36x36 & 12x12 #61012, 61011



Hip 20x20 #51801



Hip Roof 13x26 #64965

Gable-Tiered 45x105 #64406

Neo Classic 28 #51982

Customer Inspired Designs



Monoslope 22x28 #58785



Trellis 23x34 #59526



616.888.3500





Inverted Gable 35x65 #62399



Monoslope 24x24 #64249

Total Park Package

Frisbie Park - Rialto, CA



Carnival 24 #59639







Chelsea 16x24 #62548





Curved Trellis 12x92 #58961

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INC. NO. INC.

616.888.3500



Cantilevered Walkway Cover 10X16 #62554



Cantilevered Walkway Cover 14x30 #62555

Several different structures were designed for Frisbie Park to provide appropriate shade and coverage for each area. The coordinating colors and styles make this facility both eye-catching and practical for many hours of entertainment both day and night.

Trellis 12x44 #59634

Lantern 24 #59635

Athletic Complexes





616.888.3500

Coordinate your athletic complex with a variety of Poligon structures, including dugouts, bleacher covers, concession pavilions, restroom covers, lounge areas, kiosks, and more.



Gable Roof 56x118 #55458

Monoslope 21x152 #57061

Dugout 10x32 #57444



Cantilevered Walkway Cover 14x38 #66334

Athletic Complexes



Gullwing Walkway Cover 8x12 #64321



Gable Roof Sun Shelter #55138







Barrel Vault 18x73 #57103

Monoslope 42x32 #67419



Monoslope 24x37 #65134

Farmers Markets



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TTT THE REAL

Nested Crossing 40x169 #58381





Gable-Tiered 30x228 #63582

Amphitheaters

Standard design details on page 64









Monoslope 55x60 #53081





616.888.3500

#55896



Constellation 40x20 #68598

Amphitheaters









Amphitheater 63x46 #56416





Barrel Vault 37x27 #52578

Amphitheater 42 #57396

Trellises

Standard design details on page 65



Curved Millenium Trellis 9x28 #55283







Trellis 49 #56228

Trellis 76 x10 #61570

Trellises

Standard design details on page 65







Santa Fe Trellis 10x20 #59804



Trellis 13x114 #63810





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Trellis w/ Artisan Wood 18x18 #64995

Trellis canopies are available in a variety of materials, including metal, wood, polycarbonate, and laser-cut panels.

Walkway Covers

Standard design details on page 66



#55391



Cantilevered Walkway Cover 14x56 #59252



Cantilevered Walkway Arched 12x36 #60194



Cantilevered Walkway Cover 18x34 w/ laser-cut panels #62566



Cantilevered Walkway Cover 7x25 #59666



Cantilevered Walkway Barrel Vault 11x15 #57480

Walkway Covers

Standard design details on page 66





Inverted Gable 10x32 #62728



Cladding for walkway covers is available in a variety of materials, including metal, wood, polycarbonate, and laser-cut panels.



Walkway 8x366 #63633

Walkway 15x700 #55390



Walkway 8x366 #63633

Parking Canopies



Monoslope 43x90 #57780







Northern Skyline 53x133 #63949

Monoslopes 28x73, 28x36, 30x37 #67600

Gullwing (GUL) / (GWC)

Standard design details on page 67





LEF 10x13 #59160



GUL 24x24 #64681







LEF w/ laser-cut panels 8x14 #66359



LEF 16x30 #62434



Monoslope (MSL)

Standard design details on page 68



MSL 20x30 #68963





Monoslope 30x32 #65537







MSL 22x22 #66504

Monoslope 25x84 #67442



Monoslope 26x100 #65857

Northern Skyline (NSL)

Standard design details on page 69



NSL 20x40 #58445



ARC 20x21 #61535



NSL 24x34 #64818



NSL 20x24 #58986





ARC 16x33 #53164



ARC 30x30 #61468

Large Pavilions (PLC/PVA)



PLC 66 w/ optional cupola #48205



PVA 80 #66520





PLC 94 #64938



PVA 86 #46134



Carmel (GCO2)

Standard design details on page 71











Octagon (OTC)





OTC 46 w/ optional cupola #55134

OTC 28 #55796







GXO2 28 w/ optional cupola #53097



GXO2 28 w/ optional cupola #47688





GXO 14 #62139

GXO 18 #59471



GXO 18 #63120

Grand Haven (GHX)

Standard design details on page 73



GHX 40 #55340



Tiara (TIA)

Standard design details on page 73



TIA 30x44 #67274



TIA 30x44 #67422

Hexagon (HXE)

Standard design details on page 74





HXE 32 #61440



HXE 24 #65806



HXE 40 #57566

Standard design details on page 74





MAR 40x60 #64934

Chelsea (CHE)







CHE 28x68 #65988



CHE 40x60 #66787

Gable Roof (REK)



REK 30x75 w/ gable truss ornamentation #62940





REK 16x34 #63725



REK 30x44 #63257



REK 50x125 w/ optional gable ornamentation #51976

REK 24x34 #66946

Hip Roof (RAM)

Standard design details on page 76



RAM 30x44 #55802



7 4



RAM 30x50 #49253



RAM 20x44 #63161



RAM 40x64 #61088



RAM 30x64 #59877

Carnival (CAR)

Standard design details on page 76



CAR 30 #65550

CAR 20 #61822



Crossing (CRS)





CRS 16 w/ optional cupola #57466

CRS 24 w/ optional gable ornamentation #58988



CRS 24 #58988



Square (SQR)

Standard design details on page 77



SQR 30 #39564





SQR 42 w/ optional polycarbonate panels #67085



SQR 30 #56169



SQR 30 #56169

SQR 20 #50091

Sun Shelters (SSG/SSH)

Standard design details on page 78



SSG 8x12 w/ optional backless metal bench #55286



SSH 12x12 #48098



SSH 12x12 #48146

Kiosk (KSK)

Standard design details on page 79



KSK 3-8

Portal (PRT)

Standard design details on page 79



PRT 11 w/ optional lettered arch & medallion #47989



KSK 1-8



PRT 23 w/ optional lettered arch & medallion #56635



Standard design details on page 80





Standard design details on page 80





PLE-HC1 #60547



DUG 10x24 #63195



DUG 14x55 #59051



PLE 6x15 #48887



PRV-S #64442

















Poligon Fabric structures allow full shade in fun artistic ways.

Each structure is designed with High Density Polyethylene (HDPE) Shade Fabric and offers professional grade architectural shade that blocks up to 98.8% of harmful UV sun rays. Fabric is also flame retardant and fade/tear resistant.

Visit our website for more fabric shade ideas.



















Poligon Wood structures bring a natural look to your shelter and are available in a variety of stain colors and roofing options.

Visit our website for more wood shade ideas.

	-	W	-
1		=	-
L			
			7





KMO 40x25

Kokomo KMO (pg 18)

Suggested Sizes			
w	L	SF	
30′	25′	581	
40′	25′	818	
50′	25′	1032	
	W 30' 40'	W L 30' 25' 40' 25'	

Additional sizes available in 1' increments









7111IN

HHA 24'



Minimum Clearance Height w/ MR Roof

Η	louston
	HHA (pg 18)

Suggested Sizes BIN w SF L HHA 16′ 7′ 83 HHA 20′ 130 9′ HHA 24′ 11' 187 HHA 13′ 28′ 255 HHA 32′ 14′ 333

Additional sizes available in 1' increments











Santa Fe (truss end only)

Modern

Metro

Artisan Wood Options

Poligon Artisan Wood structures uniquely combine the natural warmth of wood trellis members (latilla) with the strength and durability of steel supporting framework. Wood is available in multiple options, including IPE, Mahogany, Cedar, and Accoya.









Const	tell	lati	on
CONS			

CST (pg 19)

Suggested Sizes				
	BIN	w	L	SF
	CST	30′	20′	500
	CST	40′	30′	1000
	Additional sizes available in 1' increments			





Millennium Trellis MIL (pg 22)

Suggested Sizes

BIN	W	L	SF
MIL	9′	16′	144
MIL	9′	28′	252
MIL	9′	40′	360

Additional sizes available in 1' increments

Santa Fe Trellis SFE (pg 25)

Suggested Sizes			
BIN	w	L	SF
SFE	10′	10′	100
SFE	10′	20′	200
SFE	10′	30′	300
SFE	10′	40′	400
SFE	20′	20′	400
SFE	20′	30′	600
SFE	20′	40′	800

Additional sizes available in 1' increments



	w	1
L .	-	



12

Minimum Clearance Height w/ MR Roof

Covered Walkway
Cantilevered
CWC (pg 26) Suggested Sizes

L

12′

16′

20′

12′

16′

20′

Additional sizes available in 1' increments

SF

96

128

160

120

160

200

w

8′

8′

8′

10'

10'

10′

BIN

CWC

CWC

CWC

CWC

CWC

CWC













CWA 8x12

CWC 8x12



Covered Walkway Arched

U.	\bigcirc
1	T II
	7'-6"
	Minimum Clearance Height w/ MG Roof

CWA (pg 27)			
Suggested Sizes			
BIN	w	L	SF
CWA	8′	12′	96
CWA	8′	18′	128
0.444	0'	24'	160

	CWA	8	12	96	
	CWA	8′	18′	128	
	CWA	8′	24′	160	
	CWA	10′	12′	120	
	CWA	10′	18′	180	
	CWA	10′	24′	240	
ĺ	Additional sizes available in 1' increments				









$Gullwing_{_{GUL\,(pg\,32)}}$

Suggested Sizes

BIN	w	L	SF
GUL	20′	20′	400
GUL	24′	24′	576
GUL	30′	30′	900

Additional sizes available in 1' increments



Gullwing Walkway Cantilevered GWC (pg 14)



Suggested Sizes

BIN	w	L	SF
GWC	15′	12′	180
GWC	15′	16′	240
GWC	15′	20′	300

Additional sizes available in 1' increments



Minimum Clearance Height w/ MR Roof







LEF 12x23

Leaf
LEF (pg 33)

Suggested Sizes BIN L SF w LEF 14′ 88 8′ LEF 12′ 23′ 216 LEF 16′ 30′ 377 LEF 20′ 38′ 597

Additional sizes available in 1' increments













Monos MSL (pg 35)	lope
MSL (pg 35))

Suggested Sizes					
BIN	w	L	SF		
MSL	10′	21′	210		
MSL	16′	30′	480		
MSL	20′	30′	600		
MSL	26′	30′	780		

Additional sizes available in 1' increments







MSL 10x21



Minimum Clearance Height w/ MR Roof

12

11







Northern Skyline

Suggested Sizes

BIN	w	L	SF
NSL	20′	24′	480
NSL	24′	34′	816
NSL	30′	34′	1020
NSL	30′	50′	1500

Additional sizes available in 1' increments







Suggested Sizes

BIN	W	L	SF
ARC	12′	12′	144
ARC	16′	18′	288
ARC	16′	33′	528
ARC	20′	21′	420
ARC	20′	30′	600
ARC	20′	39′	730
ARC	30′	30′	900

Additional sizes available in 1' increments












Pav		ic	n
PVA	(pg	39)	

Sug	gested	Sizes
BIN	Size	SF
PVA	40′	1200
PVA	50′	1875
PVA	60′	2700
PVA	66′	3267
PVA	72′	3888
PVA	86′	5547

Additional sizes available in 1' increments









Minimum Clearance Height w/ MR Root PVA 60

Carmel GCO2 (pg 40)

Suggested Sizes

BIN	Size	SF
GCO2	20′	283
GCO2	24′	407
GCO2	28′	554
GCO2	32′	724

Additional sizes available in 1' increments

Octagon OTC (pg 41)

Suggested Sizes

BIN	Size	SF
OTC	16′	181
OTC	20′	283
OTC	24′	407
OTC	28′	554
OTC	32′	724
OTC	40′	1131
OTC	48′	1629
OTC	58′	2379
OTC	64′	2896









Clerestory Oxford GXO2 (pg 42)

Sug	gested	Sizes
BIN	Size	SF
GXO2	24′	374
GXO2	28′	509
GXO2	32′	665
GXO2	40′	1039
GXO2	48′	1496
GXO2	58′	2185
GXO2	64′	2660
GXO2	76′	3752

Additional sizes available in 1' increments

















Oxford GXO (pg 43)

Suggested Sizes

BIN	Size	SF
GXO	14′	127
GXO	18′	210
GXO	22′	314

Additional sizes available in 1' increments







Grand Haven

GHX (pg 44)

Suggested Sizes

BIN	Size	SF
GHX	24′	374
GHX	28′	509
GHX	32′	665

Additional sizes available in 1' increments Gable pitch 12:12





TIA 25x37

Tiara TIA (pg 44)

Suggested Sizes

BIN	w	L	SF
TIA	15′	24′	300
TIA	17′	26′	358
TIA	20′	29′	500
TIA	25′	37′	744
TIA	30′	44′	1125
TIA	31′	46′	1148
TIA	35′	51′	1531







32' and larger goes to 3.5:12 pitch

12

Minimum Clearance Height w/ MR Roof

Hexagon

Sug	ggested	Sizes	
BIN	Size	SF	
HXE	16′	166	
HXE	20′	260	
HXE	24′	374	
HXE	28′	509	
HXE	32′	664	
HXE	36′	842	
HXE	40′	1039	
HXE	48′	1496	
HXE	58′	2185	
HXE	64′	2660	

Additional sizes available in 1' increments







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BIN	W	L	SF
MAR	14′	24′	336
MAR	20′	24′	480
MAR	24′	34′	816
MAR	30′	34′	1020
MAR	40′	44′	1760
Additional	sizes ava	ilable in 1	' increments

Minimum Clearance Height w/ MR Roof

12

Marquee MAR (pg 46)

Sugges	ted Size	s

BIN	w	L	SF
MAR	14′	24′	336
MAR	20′	24′	480
MAR	24′	34′	816
MAR	30′	34′	1020
MAR	40′	44′	1760

Minimum Clearance Height w/ MR Roof



w	L	SF
L4'	24′	336
20'	24′	480
24′	34′	816
30′	34′	1020

7'-6"





Suggested Sizes

BIN	W	L	SF
CHE	16′	24′	384
CHE	16′	34′	544
CHE	20′	24′	480
CHE	20′	34′	680
CHE	24′	34′	816
CHE	24′	44′	1056
CHE	24′	64′	1536
CHE	30′	34′	1020
CHE	30′	44′	1320

Additional sizes available in 1' increments

Gable Roof REK (pg 48-49)

BIN	w	L	SF	
REK	8′	9′	72	
REK	8′	16′	128	
REK	8′	24′	192	
REK	16′	24′	384	
REK	16′	34′	544	
REK	16′	44′	704	
REK	16′	64′	1024	
REK	20′	24′	480	
REK	20′	34′	680	
REK	20′	44′	880	
REK	20′	64′	1280	
REK	24′	24′	576	
REK	24′	34′	816	
REK	24′	44′	1056	

REK 24′ 64′ 1536 REK 24′ 84′ 2016 REK 30′ 34′ 1020 30′ 1320 REK 44′ REK 30′ 64′ 1920 REK 30′ 84′ 2520 REK 30′ 104′ 3120 REK 40′ 44′ 1760 REK 40′ 64′ 2560 40′ REK 84′ 3360 REK 40′ 104′ 4160 REK 50′ 64′ 3200 REK 50′ 84′ 4200 REK 50′ 104′ 5200

Additional sizes available in 1' increments

Suggested Sizes









BIN	w	L	SF
RAM	8′	12′	96
RAM	8′	20′	160
RAM	8′	28′	224
RAM	12′	18′	216
RAM	12′	22′	264
RAM	12′	32′	384
RAM	12′	42′	504
RAM	16′	24′	384
RAM	16′	34′	544
RAM	16′	44′	704
RAM	16′	64′	1024
RAM	20′	24′	480
RAM	20′	34′	680
RAM	20′	44′	880
RAM	20′	64′	1280
RAM	24′	34′	816
RAM	24′	44′	1056

Suggested Sizes

]	BIN	w	L	SF
]	RAM	24′	64′	1536
]	RAM	24′	84′	2016
]	RAM	24′	104′	2496
]	RAM	30′	34′	1020
]	RAM	30′	44′	1320
]	RAM	30′	64′	1920
]	RAM	30′	84′	2520
]	RAM	30′	104′	3120
]	RAM	40′	44′	1760
]	RAM	40′	64′	2560
]	RAM	40′	84′	3360
	RAM	40′	104′	4160
]	RAM	50′	64′	3200
]	RAM	50′	70′	3500
	RAM	50′	90′	4500
]	RAM	50′	110′	5500

Additional sizes available in 1' increments

Rectangular Hip Roof

w





Minimum Clearance Height w/ MR Roof













Suggested Sizes				
BIN	w	SF		
CAR	16′	256		
CAR	20′	400		
CAR	24′	576		
CAR	30'	900		

Carnival

CAR (pg 52)

900 30′ CAR 1600 CAR 40′

Additional sizes available in 1' increments

616.888.3500



$Crossing_{_{CRS\,(pg\,53)}}$

Suggested Sizes

BIN	w	SF
CRS	12′	144
CRS	16′	256
CRS	20′	400
CRS	24′	576
CRS	30′	900

Additional sizes available in 1' increments



Square

SQR (pg 54-55)

Suggested Sizes

BIN	w	SF	
SQR	12′	144	
SQR	16′	256	
SQR	20′	400	
SQR	24′	576	
SQR	30′	900	
SQR	36′	1296	
SQR	40′	1600	
SQR	50′	2500	



Suggested Sizes

SF

100

144

w

10'

12′

Additional sizes available in 1' increments

BIN SSG

SSG



616.888.3500

1

78

SSH 10





Suggested Sizes

BIN	w	SF
KSK1-8	8′	20
KSK3-8	8′	20

Additional sizes available in 1' increments



Portal PRT (pg 57)

Suggested Sizes

BIN	w
PRT	7′
PRT	11′
PRT	15′
PRT	19′
PRT	23′





D	DUG	(pg 58)	ut
	Jugges	steu SIZE	:>
DIN	\M/		CE

BIN	W	L	SF
DUG	10′	12′	120
DUG	10′	16′	160
DUG	10′	24′	240
DUG	10′	32′	320
DUG	10′	36′	360
DUG	10′	48′	480
Additiona	sizes ava	ilable in 1	' increments

Assembly

Poligon shelters are bolt-together steel frames, with a powder coat finish, that require no field welding. Roof decks are of either metal, tongue and groove, or structural insulated panels (with groove beaded ceiling). Secondary roofing is available in multi-rib, mega-rib, standing seam, or asphalt shingles. This predesigned package is shipped as a knocked-down pre-fabricated kit that includes the structural frame, roof deck, roofing, fasteners, trim, optional ornamentation and installation instructions. All shelters can be erected quickly when compared to typical construction. Certified Poligon Installers are recommended for the construction. Independent foundations can be designed by Poligon.



Frames are easily bolted together with provided fasteners



Frame complete and ready for roofing



Installation of metal roofing panels

DUG 10x16





Privacy		elter
	a ~ F (1)	

PRV (pg 59)

Suggested Sizes					
BIN	w	L	SF		
PRV - S	6.67′	6.33′	42		
PRV - D	6.67′	10.5′	70		











PLE - HC1

Portable L	_avatory
Enclos	sure

PLE (pg 59)

BIN	W	L	SF	
PLE - HC1	9′	9′	81	
PLE - HC2	10′9″	18′4″	197	
Additional sizes available in 1' increments				





No field welding required during erection



Supporting roof deck is installed



Installation of metal roofing panels

Picnic Table Capacity

The matrices below provide the approximate picnic table capacities for each shelter. Totals were calculated using a standard picnic table size of 5x6. Numbers are approximate and informational only.

Polygonal Shelters						
	Hex.	Oct.	Dod.			
16'	2	1				
20'	4	4				
24'	5	4				
28'	7	5				
32'	8	8				
40'	14	14	16			
48'	22	22				
50 '			27			
58'	34	36				
60'			41			
64'	42	47				
66'			52			
86'			79			

Rectangular Hip Roof Shelters

	12'	16'	20'	24'	30'	40'	50'
18'	2						
22'	3						
24'		6	7				
34'		8	10	12	16		
42'	6						
44'		12	14	18	20	30	
64'		16	22	25	32	42	56
70'							64
84'				37	40	55	
90'							81
104'				48	52	79	
110'							96

Gable Roof Shelters

	16'	20'	24'	30'	40'	50 '
24'	6	7	9			
34'	8	10	12	16		
14 '	12	14	18	20	30	
64'	16	22	25	32	42	56
34'		28	37	40	55	73
104'				52	79	90

Square Shelters

	12'	16'	20'	24'	30'	36'	40'	50 '
Tables	1	2	6	8	14	20	25	42

Shelter Nomenclature



LEED Points

Poligon products can assist your project with LEED certification

What is LEED?



Leadership in Energy and Environmental Design (LEED) is a national standard developed by the United States Green Building Council (USGBC) to certify sustainable buildings. LEED buildings can help save energy, conserve resources, protect occupant health, and improve owners' bottom lines. LEED utilizes a system of points awarded in multiple environmental categories for achieving specific levels of sustainable performance.

LEED Category	Potential Credits				
Location and Transpor Provide short-term and Storage amount and pr	1				
Sustainable Sites (SS) Option 1: Using roofing			ater than the following:	1-2	
	Slope	Initial SRI ¹	3-year aged SRI ¹		
Low-sloped roof	≤ 2:12	82	64		
Steep-sloped roof	> 2:12	39	32		
Option 2: Place a minim aged SRI of at least 32 ¹ .					
Materials and Resources (MR) - MR Credit: Building Product Disclosure and Optimization 1 - Sourcing of Raw Materials 1 Products with recycled content of at least 20%, by cost, of the total value of permanently installed building products in the project. Recycled content is the sum of the postconsumer recycled content plus one-half the preconsumer recycled content, based on weight ² .					
Indoor Environmenta Control Create designated smo and operable windows.	N/A				

¹ Certain Poligon roof colors meet this requirement. (Contact customer service or your local sales representative for more information.) ² Contact customer service or your local sales representative for assistance in determining recycled contact for your specific project.

616.888.3500



Railing & Overhead Ornamentation

Our state-of-the-art laser can custom cut any ornamentation or railing. Please contact your sales representative to discuss other design ideas for your shelter.



Tampa railing and overhead ornamentation

San Jose railing and overhead ornamentation

Standard Stamped Metal Cap





Lower Stanchion with Cast Iron Cap





Gable Ornamentation





Ornamentation Selection

Overhead and Clerestory Ornamentation

Overhead and clerestory ornamentation is available by itself or together with decorative railing and guardrail designs.

36" Railings

Railings are used to accent the shelter design and direct foot traffic throughout.

42" Guardrails

Code-compliant guard rails for instances when a structure's walking surface is more than 30 inches above or below grade.

Upper and Lower Stanchions

Stanchions are required when the ornamentation span exceeds 10 feet. All stanchions come with the standard stamped cap. The cast stanchion cap is optional.

Corbels

Diamond corbels come standard with Diamond overhead ornamentation and are optional for any other style.

Custom Design To create a unique look, custom design for all ornamentation is available upon request.

poligon.com

Columns

- Columns come in a variety of shapes and sizes. Oversized square, round and rectangular columns are available with or without accent bands
- Not all columns are available on all shelters. Consult Poligon for building specifics
- Columns shown are for illustration only and are not meant to be standards. Bands can be placed in any quantity and most locations on any of the columns
- The maximum height for the column base access holes is 11" (center). Band location must allow the access hole to be placed within the lower 11" of the column
- Column sizes can often be oversized for look but cannot be undersized because of structural requirements
- Stub columns are available for mounting on masonry, bricks or pieces designed by others





Anchor Bolt Connections



Internal Anchor Bolts At Finish Grade





INTERNAL ANCHOR BOLTS



Electrical Cutouts

When electrical access is requested, a $1 \frac{1}{8}$ diameter hole is provided through the column baseplate and $\frac{3}{4}$ " diameter holes are provided through connection plates to allow wire access through columns, trusses, and into the compression ring/tube or ridge beam. Electrical cutouts are round or rectangular holes in structural members required for installation of electrical fixtures or additional wire access. All cutout requests must be reviewed by our engineering department as their placement may affect structural integrity. Poligon is not responsible for unauthorized cutouts made in the field. Unauthorized electrical cutouts made in the field will void the shelter's warranty.

Typical cutout locations:

- Outlet cutouts are typically placed 18" above grade on the inside face of the column
- Light switch cutouts are typically located 48" above grade on the inside face of the column ٠
- All cutouts are at least 12" from any structural joints
- All cutouts are typically centered on the member wall and not close to the corners
- Cutouts can be located through cover plates, such as the bottom of a juncture column
- The standard rectangular cutout size is 2 3/8" x 4" and round cutout size is 3/4" diameter ٠





Poligon Glider

Poligon Gliders provide seating for your structures in a fun new way. Constructed from commercial grade steel, the gliders are both comfortable and modern with horizontal slat seating and clean simple lines.

- Bench length 48" or 72" ٠
- Seat height 19" ٠
- Laser cut and welded end frames 3/8" Steel framework 1/4" x 1-1/2"
- Bench weight capacity 600lbs and 850lbs, respectively
- Stops limiting swing travel to 8 degrees fore and aft (16 degrees total)
- 3 year warranty





Equipment Enclosures

Poligon offers equipment enclosures to protect mechanical equipment while providing a safety barrier between patrons and machinery. Each structure is enclosed with perforated paneling that allows both ventilation and privacy. They are also a functional way to mask unsightly equipment from public view. Structures can be adjusted to any size and shape to meet your site needs.

- Screens made from aluminum and powder coated to match steel frame ٠
- ٠
- open sections without enclosure panels



















11' x 16' Hip Roof

Typical hole size is 1/4" diameter but can be adjusted to create various privacy levels and airflow Shelters can be designed with various types of entry points, including lockable double doors or by leaving





11' x 16' Monoslope

Low Reveal Clerestory



Standard Reveal Clerestory

Low Reveal Clerestory

Cupolas

Cupolas have a three-letter code system. Each three-letter code (i.e. "CMA") begins with "C" to indicate Cupola, followed by a second letter indicating the style and a third indicating the pitch. Cupola size will be determined by building size, although specific size requests will be accommodated. Please consult with your sales representative for further details. Wood cupolas available upon request.



Sheet Metal Non-Venting (Square shown) Available for Crossing, Gable Ridge, Square, Hexagon, and Octagon shelters.



Framed Vented w/ or w/o Ornamentation (Hexagon shown) Available for Square, Crossing, Gable, Hexagon, Octagon, and Dodecagon shelters. Ornamentation can vary with shelter.



Framed Vented (Octagon shown) Available for Square, Crossing, Gable Ridge, Hexagon, Octagon, and Dodecagon shelters.



Neo Classic Non-Venting Available for Square, Hexagon, Octagon, and Dodecagon shelters.

Poli-5000 Powder Coat

Poli-5000 is a completely in-house process, performed and overseen by Porter Corp.

Steps include:

- Eight-direction shot blasting of steel to near white condition
- Wash and iron phosphate treatment
- Special epoxy primer powder coat base
- Super Durable TGIC powder top coat
- Baking and curing
- Inspection and packaging

Why Poli-5000?

- Superior performance results over traditional powder coat
- Reduced overall cost and a better finish than field painting over factory applied red oxide primers
- No VOC's with Poli-5000 •
- More environmentally friendly than liquid paint, ecoat primer, and zinc rich primer systems
- Reliable in-house inspection of all parts ٠
- Upgrade from 'standard' to Super Durable TGIC provides superior color and gloss retention as well as corrosion resistance
- No need for clear top coats (that make touch-up blotchy) when using Super Durable TGIC
- Large offering of 30 standard smooth colors and 9 textured colors



Poligon powder coats all exposed washers, nuts, and bolts on every shelter

Scrat Adhe Resis Hardn

Visit our website for current color selection

Test Description	Test Method	Poli-5000 Results
Salt Spray Resistance	ASTM B 117/ ASTM D 1654 Method 2 (scraping)	10,000 hours, no creep from scribe line, rating of 10
Humidity	ASTM D2247-02	10,000 hours with no loss of adhesion or blistering
Light UV/ Resistance	ASTM G154-04 2000 hours exposure. Alternate cycles (4 hours UVC and 4 hours condensation)	a) No chalking b) 75% color retention c) Color variation-maximum 3.0 E variation CIE formula (before and after 2,000 hours exposure)
Stain Resistance	ASTM D1308-02e1 24 hours exposure with 10% concentration	No stain from following: Mustard, Tannic Acid, Catsup, Citric Acid, Coffee, Tartaric Acid, Pepsi Cola, Beer, Oleic Acid, Lactic Acid, Orange Juice
Scratch Resistance	Hoffman Scratch Hardness Tester	No substrate appearance with 1,000 gram load
Adhesion	ASTM D3359-02	ASTM Class 4B rating or better
Resistance Impact	ASTM D2794-93	100 in-lbs. w/o cracking
Hardness	ASTM D3363-92a	2H min-no indentation
Flexibility	ASTM D522-93a	1/8" no cracking/loss of adhesion at bend
Abrasion	Taber abraser CS10 Wheel (1,000 mg load)	14 mg. max weight loss per cycle
Solvent Resistance	50+ MEK rubs	Minimal to no dulling or color removal

Poli-5000 Powder Coat

The most durable powder coat finish system in the industry. Steel is shot blasted to a near white condition, given a phosphate wash, coated with an epoxy primer, and then followed with a coat of polyester TGIC powder formulated for maximum UV protection, adhesion, and fade resistance. The Poligon Poli-5000 process is a completely in-house system and is available in a wide range of smooth, textured, and metallic colors.

Galvanized

A basic, long-accepted method of protecting steel from corrosion, galvanizing is the process of coating steel with zinc using a hot bath process. Galvanizing is considered the best corrosion protection process available for steel components and is commonly used where exposure to salt air is anticipated. The galvanizing process results in a random, spangled finish that can also have alternating areas of haze and sheen.

Powder Coat Over Galvanized

The combination of hot dip galvanizing with TGIC powder coating combines the ultimate corrosion protection with the color selection of super-durable powder coating. This long-sought combination has been difficult to successfully achieve but a new proprietary process is now making this finish combination available. Due to the galvanizing process, there will be noticeable texture areas in the final powder coat finish.

Roofs & Roofing

Visit our website for current color selection

Metal Roofing

Poligon offers 3 types of metal roof decking for structures. Each one is sourced from McElroy Metal, a trusted vendor partner for over 30 years, and they come standard as 24 gauge with a Kynar 500 factory applied finish. Poligon offers 30 standard colors, with the underside of the decking being off-white. Each profile can be specified for their unique features and benefits. All Poligon roofing options are engineered to required building code. Trim is supplied on all metal roof types.

Multi Rib



- Poligon's most popular and economical roof deck
- Attached to frame with self-tapping screws and gaskets, color matched to roof

Supporting deck may be required in regions with high wind or snow load

Tongue & Groove Stained

2x6 Hem Fir

by installer

Multiple stain options

Up to 16' lengths are cut to fit on site

Offers a flush underside and clean aesthetic (no visible fasteners)

Factory cut panels

requirements

•

Standing Seam



Mega Rib



Corrugated Profile offers a unique aesthetic for canopies

Standing seam only roofs available in 22 gauge only

• Utilized for rolled/curved roof applications

Cut and hemmed on site by installer

Supporting Roof Deck

Poligon offers supporting roof decks when specified. Supporting roof decks are used to offer both function and style to outdoor structures. The addition of wood warms up the underside of the canopy, while also adding strength, structure, and improved acoustics. Felt is supplied by Poligon.

Tongue & Groove Unstained

- 2x6 Southern Yellow Pine
- Up to 16' lengths are cut to fit on site by installer

Structural Insulated Panels (SIPs)

- Provides insulative properties for sound and heat
- Expanded Polystyrene sandwiched between OSB and grooved Douglas Fir siding creating a T&G aesthetic on the underside
- Multiple factory stain options (unstained not available)

Additional Roof Options

Transparent/Translucent

Monolithic Polycarbonate

- More economical solution than glass

Honeycomb Polycarbonate

- Honeycomb pattern translucent panel

Corrugated Polycarbonate

- Impact resistant and virtually unbreakable
- Blocks 99.9% of harmful UV radiation

Laser Cut Aluminum Panels

- Various standard patterns

• 30 Year Warranty Traditional aesthetic

Traditional



Trellis Latilla



Powdercoated to match the framing

Steel

- 7 end beam design options

Artisan Wood

- Multiple end beam design options

















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Panel with a standing seam and batten system to ensure water will not penetrate Available is 6 standard translucent and transparent options Must be installed by certified CPI installer

• Used in applications where code or design prohibits monolithic More economical than monolithic and lighter than glass Must be installed by certified CPI installer

Lightweight – less than half the weight of glass

• Many unique powdercoat finishes available Fully engineered solution meeting local building code loading requirements

Asphalt Architectural Shingles

Supporting roof deck required

• Sizing can be uniquely specified to enhance aesthetic and shade cast

• Ipe - Brazilian hard wood that provides the most durability • Mahogany - Adds a unique rich color tone to a trellis Cedar - Most economical, available in rough or smooth finish Accoya - Engineered wood, lighter natural color



Information, including colors and sizes, subject to change. Please visit our website for latest options and offerings.



Visit poligon.com/find-a-rep to find your local Poligon representative who can help get you started on your next Open Air Structure.