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[Front Cover] Millennium Park - Grand Rapids, MI design by VIRIDIS Design Group

Konkel Park - Greenfield, WI 40'x30' Constellation Amphitheater





Villano Park - Hamden, CT 4 44'x35' Constellation Amphitheater



Elementary School - Indianapolis, IN 6 12'x12' & 12'x22' Arched Cantilevers





Central Park - Mishawaka, IN 10 36'x56' Gable Crossing



King Greenleaf Park - Washington, D.C. 12 16'x30' Leaf







Alga Norte Park - Carlsbad, CA 18 Monoslopes w/ solar panels (by others)



North Natomas Farmer's Market - Sacramento, CA 35'x50' Arch / 40'x60' 2 -Tier Arch 21





Millennium Park - Grand Rapids, MI [front cover] 24 52'x119' Gable Roof w/ Dormers Office Plaza - Plantation, FL 20'x20' Walkway Cover 25



Toledo Hospital - Toledo, OH 26 8'x33' Cantilevered Walkway Cover



Residential Carport - Albany, Bahamas 28 16'x109' Monoslope



Kenneth Hahn State Rec. Area - Los Angeles, CA 30 Parasoleil Panels





Residential Building - Weehawken, NJ 34 12'x12' Rooftop Trellis



UWH Healing Garden - Madison, WI 36 Architect - Ken Saiki Design - 15'x24' Millennium Trellis





Bear Country - Pigeon Forge, TN 40 38' Grand Carmel Pavilion



Trojan Park - Wellston, MO 42 36'x100' Hypar

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Some shelters require special design attention because of their location and/or purpose. The following illustrations show examples of shelter designs that can be used to create the ideal structure for your unique situation.



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This long narrow 11x70 structure gains viewer interest by incorporating decorative truss elements, T&G roof deck, standing seam roofing, and quad columns. [DB-4]



The addition of gables is one way of adding significance to a basic design. Here is an octagon 54 with four gables. [DB-7] An example of a circular cantilever shelter. These can be made in a wide variety of sizes, pitches, roof, and roofing types. This shelter is 12 deep, 36 wide and incorporates 137° of arc. [DB-1]





Simple, unique, and inexpensive, the ridge square is an unusual design. This shelter is 24 x 24 with multi-rib roofing. [DB-13]



A grouping of monoslope structures can be a good design solution when seeking a combination of picnic pavilion and performance venue. This grouping is 80 wide and 33 deep. The T&G roof deck is not only good looking but also helps to improve sound quality. [DB-28]

Arts and Craft style extended framing is another method to boost design interest. This 10 x 20 shelter will always be deserving of a second look. [DB-107]





In this example, a basic 20 x 23 gable structure is made the center of attention by adding gable and shed elements, quad columns, T&G roof deck, standing seam roofing, and a cupola. The result is a tour de force in shelter design, a showcase addition to any community. [DB-8]

When a high capacity pavilion is needed, one solution is to join gable structures to a hexagon center structure. In this example, a high-pitched 40 hexagon provides more covered space with the addition of two 18 x 24 gable wings. [DB-17]



Unique column, truss and corbel design gives this 38 x 12 x 36° circular shelter a presence, well suited to a plaza location. [DB-44]



This unusual 10x12 clerestory structure is both a practical and unique picnic shelter design. [DB-20]





This 30 x 44 clerestory SunSky shelter (Chelsea) is given increased functionality by installing polycarbonate roofing on the upper tier. This helps to increase the interior light levels in larger shelters. [DB-36]

Simple variations can create dramatic results. Here a basic 24 x 24 shelter is given increased overhang, decorative truss treatment, and site-built column wraps. [DB-29]





This dramatic 40x52 shelter uses arched roof elements and long cantilevers as key features. [DB-39]

An inexpensive means of improving interior light levels is to specify polycarbonate roofing (SunSky) in combination with standard multi-rib (MR) roofing. As the profiles are the same, the result is a seamless combination. Here a 28 x 28 REK shelter has 10 x 28 of SunSky soft white paneling allowing 85% light transmission. [DB-37]



This 20 x 24 shelter sports a combination of a straight, lower roof with an arched upper tier roof. The result is an unusual and distinctive shelter. [DB-19]



A basic hexagonal 34 shelter is transformed into a centerpiece through the use of a steeply pitched translucent cupola. This cupola with its polycarbonate paneling, not only adds additional interior lighting but also provides a glowing presence when lit at night. [DB-52]



These elliptical trellis designs create a skyward embrace. The two-column version is 20 wide and the four-column is 30 wide. The site-built column wraps provide visual stability. The look can be customized with metal and colored polycarbonate elements. [DB-54 & DB-55]



Laser cut Parasoleil aluminum panels provide more than shade, they also perpetually entertain the eye with ever changing shadow patterns. Parasoleil offers 34 individual patterns, with numerous finish options.

Finding shaded and peaceful places to enjoy a drink and meal is a basic human drive. The shelter on the left has a design focused on providing shade where needed while keeping support columns out of the activity area. Its 20 depth and 15 width can be customized to suit the application. [DB-57]



A 20 hexagon covered with Parasoleil panels and featuring a center oculus would be a prized addition at many locations. [DB-56]



A monoslope design provides straightforward coverage over a dining area. The size shown, 13 x 10, can be adjusted to suit location requirements. [DB-59]



Gable truss ornamentation is a simple way of customizing a basic shelter. Here is a 20 x 20 shelter that includes an extended overhang and unique truss design. [DB-73]



An unusual trellis on which latilla, mounted flat side perpendicular to the ground, ascend the truss framing. This trellis is 12 x 15 in size and latilla can be either steel tube or 4"x8" cedar wood. [DB-65]

Inward curved roofing is a design element associated with Asian traditions. This 16 x 20 shelter uses the inward curved roof in a basic and unpretentious manner. Additional ornamentation and column treatment is always available to adapt this design to specific situations. [DB-5]







This 16 x 25 trellis has rolled members that help create an ideal walk-through. The arch framing also provides visual interest from many vantage points. [DB-72]





Here is a 11 x 10 arc form trellis supported by a unique diverging column and truss arrangement. This trellis, or a suitably sized variation, could be an entry feature for many buildings. [DB-69] This unusual 6 x 10 trellis would make a perfect seating area or walkway cover. [DB-74] Adapted using elements of prairie design style, this 16 x 24 structure features low pitch roof, extended overhangs, T&G roof deck, standing seam roofing, and custom ornamentation. [DB-91]



This 20x28 upward arching canopy shelter design can be adapted to a wide variety of uses such as a shelter facing a vista, adjacent to a larger structure, or to cover bleachers at sports venues. [DB-97]



This shelter has what is generally referred to a Dutch hip roof. This creates an extended ridge with a small gable that encloses a louver. The Dutch hip is a design element that can be used to make any size hip roof shelter more unique. The 24 x 34 shelter shown is a suitable size for many applications. [DB-14]



This 14 x 16 butterfly trellis design features rod and clevis supported arched trellis bodies. The trellis can be positioned end-to-end to cover larger areas. [DB-85]





A perfect trellis cover for seating areas. [DB-84]

A pleasingly arched 11 x 14 trellis supported by two "Y" columns.



Inverted roof systems are becoming increasingly popular. This 20 x 20 shelter uses a center gutter to channel water runoff to a downspout. [DB-99]

Traditional clerestory shelters have long used flat roof systems. This 24 x 24 shelter uses a flat roof in conjunction with an arched roof to create an interesting and unusual structure. [DB-98]



Constant radius roofs are relatively common, but roofs having a sine wave form are not. This 18 x 36 shelter, which could be used as a picnic pavilion as well as performance venue, utilizes that form to create a pleasing and distinctive structure. [DB-106]

Adding more daylight to the interior of structures is often a goal of designers. While interior lighting is not as critical a factor in open shelters, there are instances where additional daylighting is desired. This 40 x 40 shelter features polycarbonate paneling (SunSky) to provide this light. [DB-104]





This 15 x 38 x 29° trellis makes an excellent structure for an event facility, helping to identify an entry location. The trellis can be readily adapted to meet design requirements. [DB-43]

Using a trellis in conjunction with a roofed shelter is a means to create ideal multi-use space. Here a 14 x 14 square shelter is shown with two attached 13.5 x 14 trellis wings. [DB-2]



This unique 16 x 17 trellis can be installed in a variety of ways, as an individual standalone unit, as separated opposing units as shown here, or as end-to-end assemblies. Explore the possibilities. [DB-108]



Above is a center column design with upward sloping trusses. The design can be adapted to user requirements, with some constraints. Trellis shown is 10 x 27 long overall. Trellis can be single or multiple bay units. [DB-110]

The cantilever trellis on the right has wood latilla suspended below the framework. The design can also be adapted to meet user requirements. Trellis shown is 8 x 39 overall. Trellis can be single or multiple bay units. [DB-115] Poligon has recently expanded its offerings to include trellis with wood latilla (individual members). Three wood species are offered, cedar, mahogany, and Ipe. Many trellis designs are available.





Basic gable buildings can be transformed into community gems in many ways. Here, eave and gable overhangs, pitched different from the main structure, coupled with T&G roof decking, asphalt shingles, and decorative gable elements are all incorporated to add interest. The result is a 45 x 108 venue for the largest of gatherings. [DB-40]

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[Back Cover] Harahan Bridge - Memphis, TN Self Tucker Architects / Ritchie Smith Associates - 45'x84' Double Monoslope



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