

INSTALLATION INSTRUCTIONS

DESIGN-VU Outdoor Panels

24" x 48"
Panels

Please read entire instruction sheet before you begin.

Follow these instructions and recommendations to install panels within warranty, and to avoid panel damage.

Easy to Install

Panel measurements:
24" x 48" x 5/16"

A typical project uses
12-24 panels.

Find panel weights, sizes, and other details on our website. Click on your pattern name. design-vu.com/patterns

Examples shown in this document are installation suggestions. Adjust installation configurations to meet your project requirements. If in doubt, consult a professional.

Frames & Support Structures

DESIGN-VU Decorative Modular Panels must be mounted to a frame or an existing surface or structure. They are not a stand-alone structural product.

Read through this entire section before planning your project.

1. Plan Your Design & Panel Configuration

Read through this entire section before planning your project.

Learn more about configurations and pattern orientation at design-vu.com/patterns

Find design ideas at design-vu.com/design-gallery



See installation photos at design-vu.com/installation



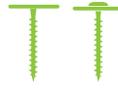
This icon indicates materials to add to your shopping list.

DESIGN-VU Decorative Modular Panels are suitable for pro builders and DIY crafters.



Easy-to-Install

Manageable sizes; easy to cut and drill; easy to install with conventional tools and construction methods.



Easy-to-Attach

Attach to frames and flat surfaces with DESIGN-VU Panel Screws or exterior decking screws w/ washers.



Sustainable

Solid 100% poly*; from 100% recycled materials & 100% recyclable.

* Material similar to vinyl fencing



Durable

Engineered for outdoor applications; weather-proof throughout North America; termite proof.

We recommend following best building practices for installing the panels. Check with proper authorities about building codes/standards that may apply to your project. If in doubt, consult a professional.

DESIGN-VU Decorative Modular Panels have a 15-Year Limited Warranty for material integrity when installed in accordance with their intended purpose – on a vertical plane, as on a wall or fence. Installations on a horizontal plane, as a roof or ceiling, are not covered by the warranty. Installers assume responsibility for ensuring installation is within warranty.

BENEFITS OF USING A TIMBER FRAME

Frames allow for the sturdiest and most versatile panel installation, and result in a professional, polished look. Build frame structures to almost any size and orientation – simple or sophisticated (see p. 2). Attach frames to walls, fences, and other flat surfaces, or build as free-standing structures.

- Timber frames are most economical, yielding overall lower project costs.
- Facilitate precise panel alignment and squared edges.
- Limit damage to surfaces when adjusting or adding/removing panels, and reduces number of screws into existing surfaces.
- Offset panels from surfaces allowing for airflow and expansion/contraction, creates a dimensional effects, and provides space for LED backlighting. (NOTE: Use only LED light sources.)



Fig. 1

PATTERN ORIENTATION

Mount panels in any orientation. Check for pattern repeats and flows as you plan (Fig. 2).

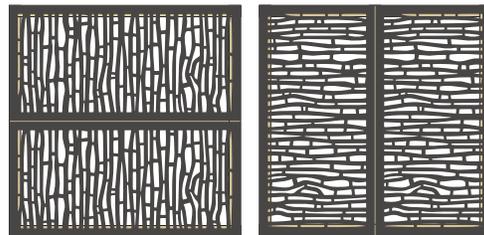


Fig. 2

Rotate/flip panels for unique patterns (Fig. 3).

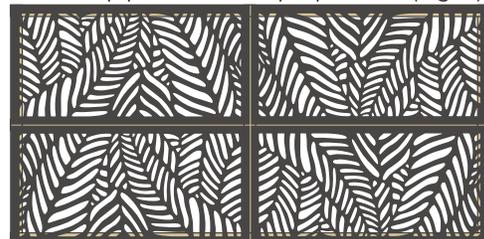
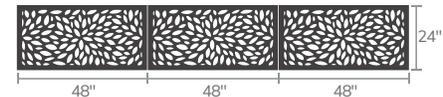


Fig. 3

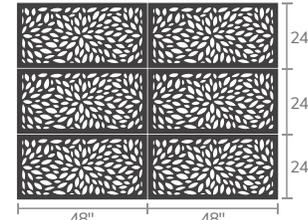
PANEL CONFIGURATION

Vertical and horizontal configurations compose standard heights and widths (Fig. 4).

Horizontal side-by-side



Horizontal stacked



Vertical side-by-side

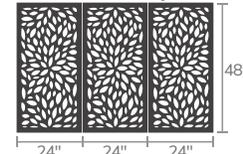
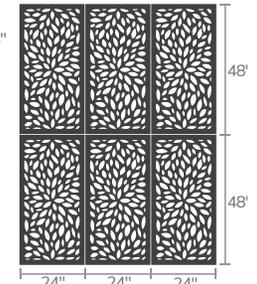


Fig. 4

Vertical stacked



15-YEAR LIMITED WARRANTY DESIGN-VU warrants to the original purchaser that our panels will be free of structural faults due to defects in manufacturing for a period not exceeding 15 years from date of purchase. This limited warranty does not cover damage resulting from misuse, improper storage or handling, improper installation, or any horizontal roofing/ceiling applications. See full warranty at design-vu.com.



2. Choose Your Frame Type & Mounting Style

DESIGN-VU Decorative Modular Panels must be mounted to a frame or an existing surface or structure. They are not a stand-alone structural product.

Read entire section before choosing frame type and mounting option.

FRAME TYPES

Surface-Mount Frame

Mount a frame with panels on fences, walls, and other flat surfaces (Figs. 5 & 6).

Multiple Panels



Fig. 5

Single Panel



Fig. 6

Free-Standing Frame

Create a divider or fence using panels on a frame with posts set in cement (Figs. 7 & 8).

Examples shown are installation suggestions. Adjust for your project's requirements. Some installations may require professional assistance.

Multiple Panels



Fig. 7

Single Panel



Fig. 8

MOUNTING STYLES

Face-Mounted Style Suited to DIYers.

Attach panels to front of frame for surface-mount (Fig. 9) and free-standing (Fig. 10) installations. Mounting panels to the face of a frame is the easiest method for keeping panels straight and square.



Fig. 9



Fig. 10

For Face-Mount Style: Continue through Steps 3–7.

Window-Mount Style

Suited to highly skilled DIYers and building professionals.

Set panels inside a frame with a recessed channel or casing to hold panel edges (Fig. 11). This style is most effective in free-standing installations.

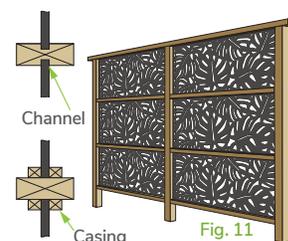


Fig. 11

For Window-Mount Style: Skip to page 4.

Face-Mount Style

3. Plan Your Frame Size & Lumber

IMPORTANT: Plan and measure your frame so it will match the exact width and height of your panels, including a 1/16" expansion gap between panels.

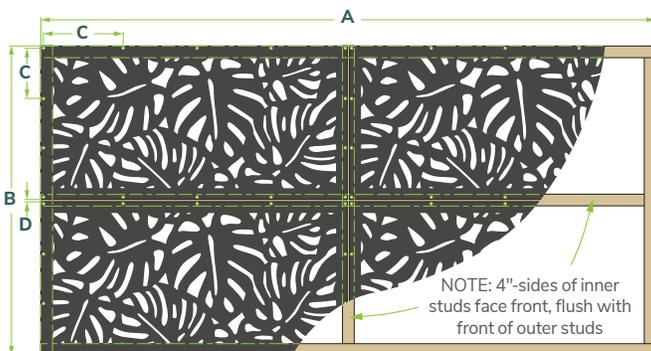
Read entire section before determining frame measurements and selecting lumber.



See installation photos at design-vu.com/installation

FRAME MEASUREMENT & PANEL SPACING – Face-Mount Style

- A. Overall Frame Width =** Total width of all panels + 1/16" space between each panel
- B. Overall Frame Height =** Total height of all panels + 1/16" space between each panel + post legs for free-standing frames
- C. Screw Spacing = 12" to 18"** on all 4 sides of each panel
- D. Expansion Gap = Mandatory 1/16"** between each panel for weather-related expansion



Window-Mount frame measurements: see page 4.

Fig. 12

NOTE: 4"-sides of inner studs face front, flush with front of outer studs

FRAME LUMBER – Face-Mount Style, Single or Multiple Panels

- **Surface-Mount Frame:** 2" x 4" Posts & Rails
- **Free-Standing Frame:** 4" x 4" Posts & 2" x 4" Rails
- **Face-Cap or End-Cap:** Add trim boards or moulding as needed (Fig. 23).



Window-Mount lumber: see page 4.

Face-Mount Style

4. Screws

Read entire section before selecting your screws.

SCREWS Mounting hardware is not included with DESIGN-VU panels.

- **Frames:** Determine appropriate screws/nails to build a frame to support weight of panels.
- **Panel Screws:** Deck screws with min. 1/8" thread \varnothing x min. 1 5/16" length. For aesthetics, paint screws to match panel color.
- **Screw Quantity:** Enough screws to place every 12" to 18" on all 4 sides of all panels (Fig. 12). For aesthetics, paint screws to match panel color.
- **Window-Mount:** No panel screws required.
- **Brick and Masonry:** Attach frame with masonry screws (Fig. 25).

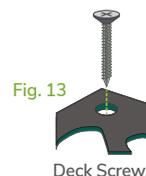


Fig. 13

Deck Screws

Face-Mount Style

5. Construct Your Frame

Read entire section before starting your frame build.

FOR ALL FRAME TYPES

Build your frame laying on a flat surface so you can check dimensions, square alignment, and mark center lines where multiple panels will join.

Doing this allows you to easily raise/lower, reposition, and level your frame when attaching to fence or wall.

IMPORTANT FOR FREE-STANDING FRAMES

Post height, weight, and footing requirements vary, so measure and consider load weight carefully.

Find panel weights, sizes, and other details on our website's Patterns page: design-vu.com/patterns

Check for underground services and features before digging.

SURFACE-MOUNT FRAME

1. Plan frame measurements to include $\frac{1}{16}$ " expansion gaps between panels (Fig. 12).
2. **Multiple-Panels:** Construct frame of 2" x 4" posts & rails with outer studs' 2" side front-facing and interior studs' 4" side front-facing and flush with front of outer studs (Fig. 14). Draw center lines on interior studs where panel edges will meet, with $\frac{1}{16}$ " expansion gaps (Figs. 15 & 22).
3. **Single-Panel:** Construct frame of 2" x 4" posts & rails with 2" side of posts & rails front-facing (Fig. 15).
4. With a helper, lift your frame into place on a fence, wall, or other flat surface. Make sure the entire frame is level, then attach.

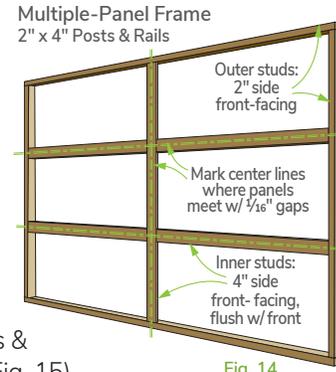


Fig. 14

Single-Panel Frame
2" x 4" Posts & Rails

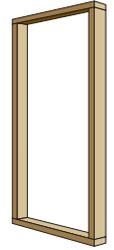


Fig. 14

FREE-STANDING FRAME – Set in Concrete

A free-standing installation requires a strong structural frame.

1. Plan frame measurements + additional length of posts for legs and footings (Fig. 12).
2. **Multiple-Panels:** Construct frame of 4" x 4" posts and 2" x 4" rails. Draw center lines on the interior studs where panel edges will meet, with $\frac{1}{16}$ " expansion gaps (Fig. 16).
3. **Single-Panel:** Construct frame of 4" x 4" posts and 2" x 4" rails (Fig. 17).
4. With a helper, lift your posts into footing holes, straighten vertically, check spacing between posts, and add post-hole concrete.

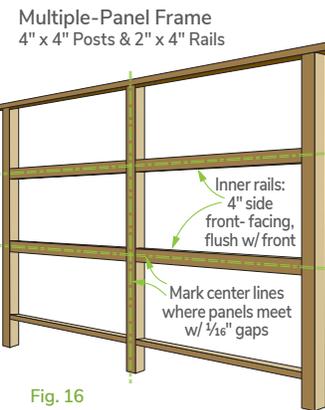


Fig. 16

Single-Panel Frame
4" x 4" Posts &
2" x 4" Rails

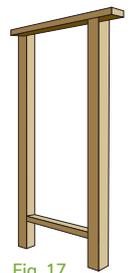


Fig. 17

Face-Mount Style

6. Prepare Panels



Read through this entire section before cutting and drilling panels.



See installation photos at design-vu.com/installation

MEASURE & FIT PANELS

Measure for panel fitting and, if needed, cut panels straight or diagonally with a circular or table saw (Fig. 18).

If desired, add a face-cap to conceal the front of cut panel edge and/or an end-cap to cover an exposed frame edge (Fig. 23).

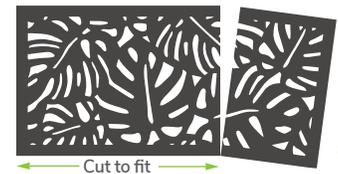


Fig. 18

PRE-DRILL PANELS

- Pre-drill panels with $\frac{1}{8}$ " holes – same size as screw thread \varnothing (Fig. 19).
- Position center of drill holes $\frac{3}{4}$ " from panel edges (Fig. 20).
- Space holes every 12" to 18" on all four sides of each panel (Fig. 21).

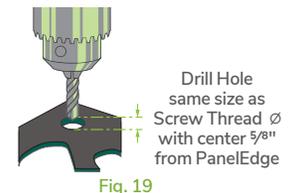


Fig. 19

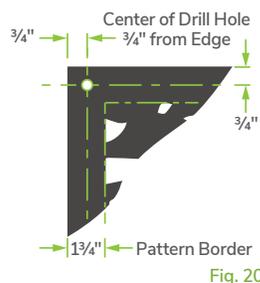


Fig. 20

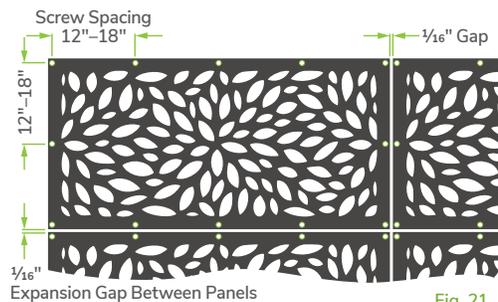


Fig. 21

Face-Mount Style

7. Attach Panels

Read through this entire section **before positioning and attaching panels.**



Fig. 23

ATTACH PANELS

1. Use 1/16" spacers to position panels on center lines of interior studs with 1/16" gaps where panels meet (Figs. 12 & 23).
2. Clamp panels to frame and attach with screws every 12"-18" on all four sides (Fig. 21).
3. To avoid panel damage and allow weather-related expansion, **do not overtighten or counter-sink screws.**

Attach to Masonry or Large Gates, Heavy Garage Doors, etc.

Check that wall/surface is flat, level, and can support the panels' weight. Build a timber frame (see page 3). Pre-drill wall with a masonry bit and attach frame to wall with masonry screws (Fig. 23).

Attach to Skeletal Structure/Stud Wall

Create a face-mount or window-mount frame. Attach to structure's studs.

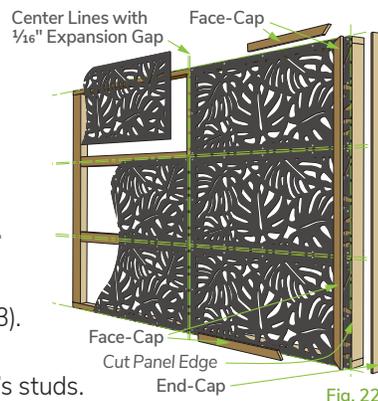


Fig. 22

Window-Mount Style

Suited to highly skilled DIYers and building professionals. See more notes for Free-Standing frames on p. 3.

FRAME SIZING & LUMBER— Single-Panel & Multiple-Panels Fig. 24

Mounting Style	A. Channel / Casing Specs (Figs. 24 & 25)	B. Width between Posts (Figs. 26 & 27) *	C. Height between Rails (Figs. 26 & 27) *	D. Overall Frame Dimensions (Figs. 25 & 26) *	Minimum Lumber Size
Channel	On all Posts & Rails: 5/16" W x 5/16" D Use 5/16" (8mm) router bit.	47 3/8" = Panel width - 5/8"	23 3/8" = Panel height - 5/8"	Frame Width = Width(s) between posts + width (3 1/2") of each post	<ul style="list-style-type: none"> • 4" x 4" Posts & 2" x 4" Rails • Need 5/16" (8mm) router bit
Casing	On all Posts & Rails: 1" x 1" casing set 5/16" apart O.C.	48" = Panel width	24" = Panel height	Frame Height = Height(s) between rails + height (1 1/2") of each rail + post legs and footings	<ul style="list-style-type: none"> • 4" x 4" Posts & 2" x 4" Rails • 1" x 1" Casings

FRAME MEASUREMENTS & CONSTRUCTION

1. Plan frame size + post legs and footings (Figs. 23, 26 & 27).
2. **Channel-Mount:** Router a 5/16" wide x 5/16" deep channel in all posts and rails (Figs. 25 & 26).
3. **Casing-Mount:** Attach 1" x 1" border casing to all posts & rails (Figs. 25 & 27).
4. Build frame laying on a flat surface. Square and level as you go.
5. Slide panels into channels/casings and attach rails. (No screws required.)
6. With a helper, lift frame into footing holes, check levelness, straighten vertically, and add post-hole concrete.

* Measurements shown are based on 4" x 4" posts & 2" x 4" rails.

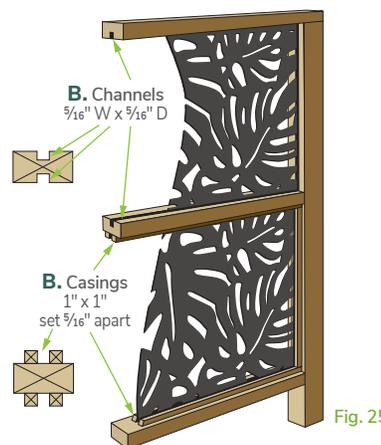


Fig. 25

Channel-Mount Style

Casing-Mount Style

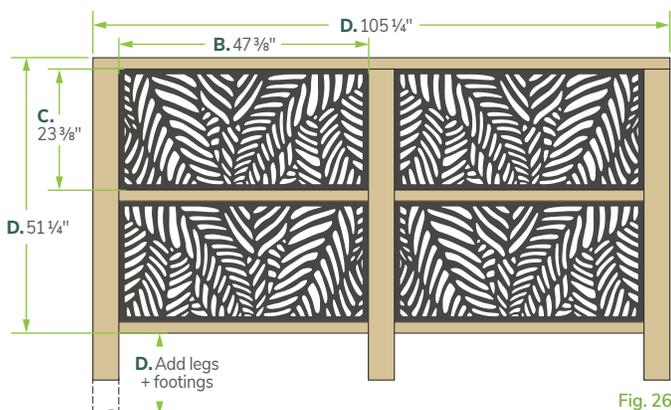


Fig. 26

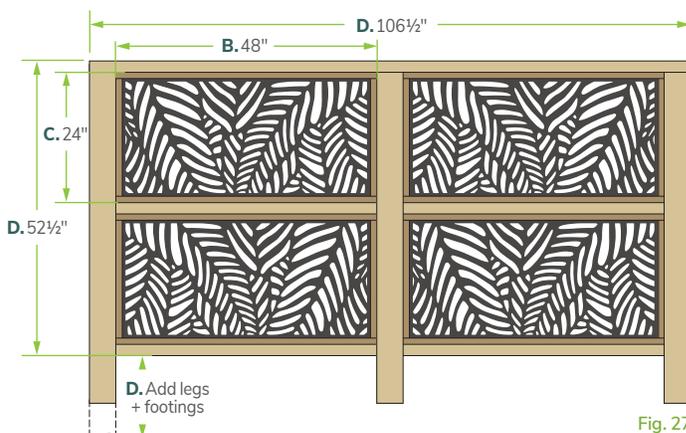


Fig. 27