

# INSTALLATION INSTRUCTIONS

## DESIGN-VU Outdoor Panels

36" x 72"  
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:  
36" x 72" 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](https://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.

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.



#### East-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.**

### 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.

### 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, create a dimensional effect, and provide space for LED backlighting. (NOTE: Use only LED light sources.)



Fig. 1

### 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](https://design-vu.com/patterns)

Find design ideas at [design-vu.com/design-gallery](https://design-vu.com/design-gallery)



See installation photos at [design-vu.com/installation](https://design-vu.com/installation)



This icon indicates materials to add to your shopping list.

### PATTERN ORIENTATION

Mount panels in any orientation. Check for pattern repeats and flows as you plan.



Fig. 2

Rotate or flip panels for unique patterns.

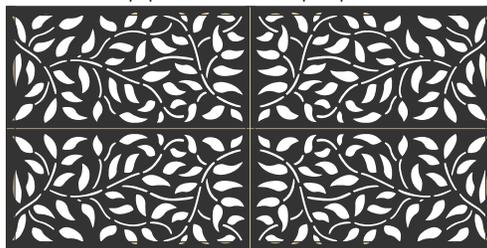
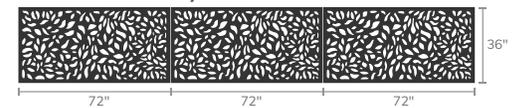


Fig. 3

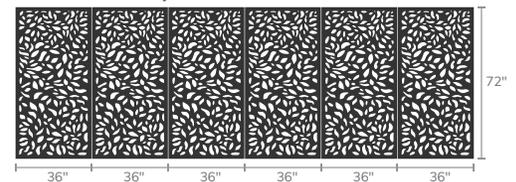
### PANEL CONFIGURATION

Vertical and horizontal configurations compose standard heights and widths.

#### Horizontal side-by-side



#### Vertical side-by-side



#### Horizontal stacked

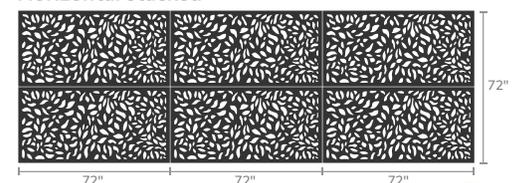


Fig. 4

**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](https://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

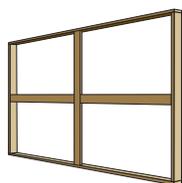


Fig. 5

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

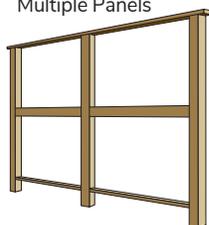


Fig. 7

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.

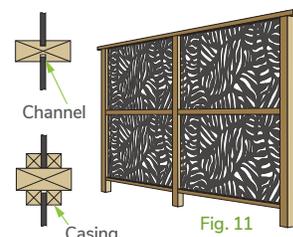


Fig. 11

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 3/16" expansion gap between panels.**

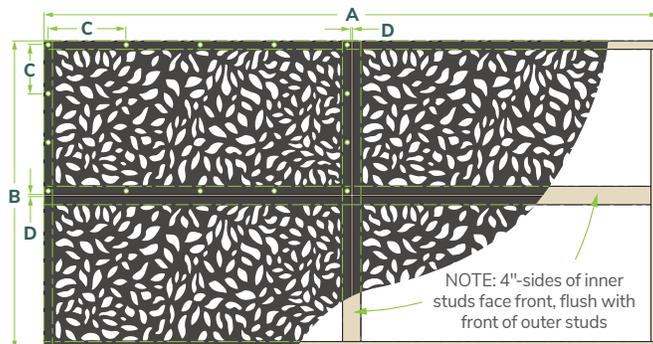
Read entire section before determining frame measurements and selecting lumber.



See installation photos at [design-vu.com/installation](http://design-vu.com/installation)

### FRAME MEASUREMENT & PANEL SPACING – Face-Mount Style

- A. Overall Frame Width =** Total width of all panels + 3/16" space between each panel
- B. Overall Frame Height =** Total height of all panels + 3/16" 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 3/16" between each panel for weather-related expansion



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

Window-Mount frame measurements: see page 4.

Fig. 12

### 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.
- **Face-Mount: Design-Vu Panel Installation Screws are recommended** OR deck screws with min. 1/8" thread  $\varnothing$  x min. 1 5/16" length, with 3/4" washers to cover drill holes (Fig. 13).
- **Screws:** 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 screws required.
- **Brick and Masonry:** Attach frame with masonry screws (Fig. 25).

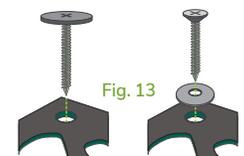


Fig. 13

Outdeco USA Panel Screws Deck Screws & 3/4" Washers

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 panel joint  $\frac{3}{16}$ " spacing. This allows you to easily raise/lower, reposition, and level your frame when attaching to fence or wall.

### IMPORTANT FOR FREE-STANDING FRAMES

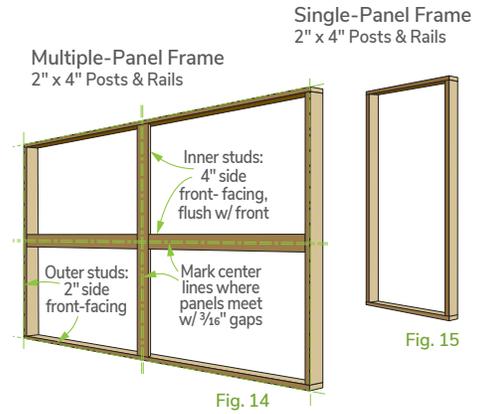
Post height, weight, and footing requirements vary, so measure and consider load weight carefully.

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

Check for underground services and features before digging.

## SURFACE-MOUNT FRAME

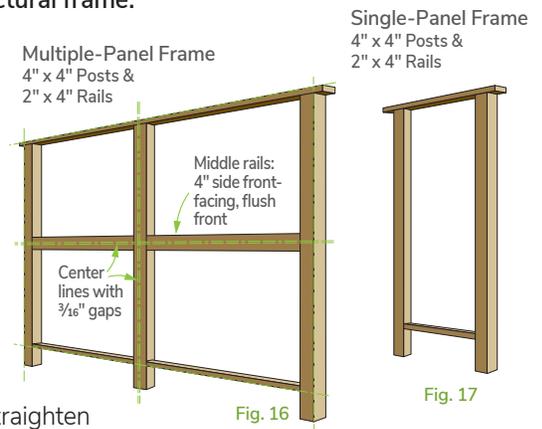
1. Plan frame measurements to include  $\frac{3}{16}$ " expansion gaps between panels (Fig. 12).
2. **Multiple-Panels:** Construct frame with outer studs' 2" side front-facing and interior studs' 4" side front-facing and flush with front of outer studs. Position center lines of the interior studs where panel edges will meet, with  $\frac{3}{16}$ " expansion gaps (Figs. 14 & 23).
3. **Single-Panel:** Construct frame 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.



## FREE-STANDING FRAME – Set in Concrete

A free-standing installation requires a strong structural frame.

1. Plan frame measurements to include  $\frac{3}{16}$ " expansion gaps between panels + additional length of posts for legs and footings (Fig. 12).
2. **Multiple-Panels:** Construct frame of 4" x 4" posts and 2" x 4" top & bottom rails, with middle rail's 4" side front facing, flush with front of outer studs. Draw center lines on the interior studs where panel edges will meet, with  $\frac{3}{16}$ " expansion gaps (Figs. 16 & 23).
3. **Single-Panel:** Construct frame with 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.



Face-Mount Style

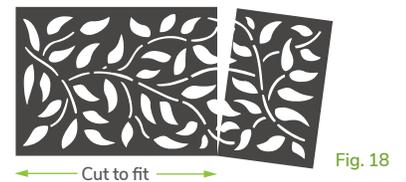
## 6. Prepare Panels



Read through this entire section before cutting and drilling panels.

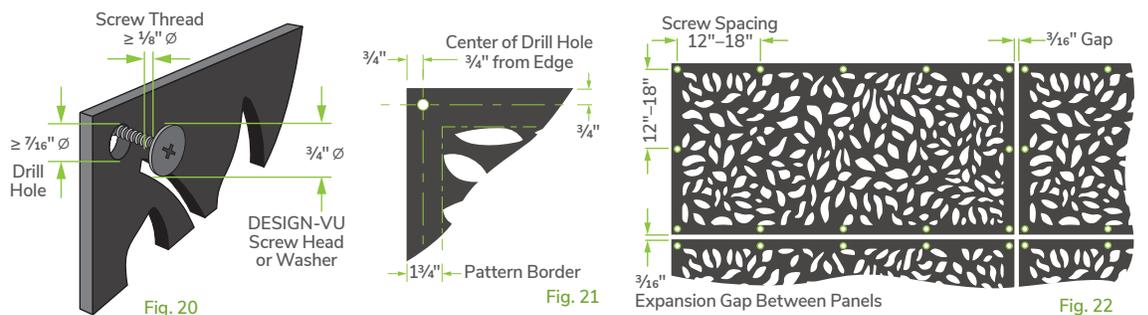
## MEASURE & FIT PANELS

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



## PRE-DRILL PANELS

- Pre-drill panels with holes  $\frac{1}{4}$ " larger than screw thread  $\varnothing$  to allow for weather-related expansion and contraction (Figs. 19 & 20).
- If using Outdeco Panel Screws, drill a hole at least  $\frac{7}{16}$ "  $\varnothing$  (Fig. 20).
- Position center of drill holes  $\frac{3}{4}$ " from panel edges (Fig. 21).
- Space holes every 12" to 18" on all four sides of each panel (Fig. 22).



Face-Mount Style

# 7. Attach Panels

Read through this entire section before positioning and attaching panels.



Fig. 25

## ATTACH PANELS

1. Use 3/16" spacers to position panels on center lines of interior studs with 3/16" gaps where panels meet (Figs. 12 & 23).
2. Clamp panels to frame and attach with screws every 12"-18" on all four sides (Fig. 22).
3. **IMPORTANT:** Drive screws at top (not in center) of the drill holes to allow for panel expansion (Fig. 24).
4. To avoid panel damage and allow weather-related expansion, **do not overtighten or counter-sink screws.**

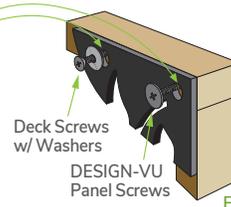


Fig. 24

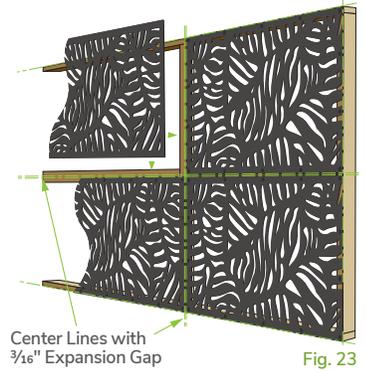


Fig. 23

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

Check that wall/surface is flat and 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. 25).

### Attach to Skeletal Structure/Stud Wall

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

## Window-Mount Style

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

## FRAME SIZING – Single-Panel & Multiple-Panels

**A. Expansion Gap:** Mandatory 3/16" space above and on both lateral sides for vertical and horizontal weather-related expansion (gap space is already included in measurements shown).

Mounting Style	B. Channel / Casing Specs (Fig. 26)	C. Width between Posts (Figs. 27 & 30)*	D. Height between Rails (Figs. 27 & 30)*	E. Overall Frame Dimensions (Figs. 27 & 28)*
<b>Channel</b> Use 5/16" (8mm) router bit.	Posts: 5/16" W x 1/2" D = 5/16" panel edge + 3/16" gap Rails: Upper 5/16" W x 1/2" D = 5/16" panel edge + 3/16" gap Lower 5/16" W x 5/16" D; no gap	71 3/8" = Panel width - 5/8"	35 3/8" = Panel height - 5/8"	Frame Width = Width(s) between posts + width (3 1/2") of each post  Frame Height = Height(s) between rails + height (1 1/2") of each rail + post legs and footings
<b>Casing</b>	Posts & Rails: 1" x 1" casing set 5/16" apart O.C.; 3/16" gap on upper rails & posts; no gap at bottom	72 3/8" = Panel width + 3/8"	36 3/16" = Panel height + 3/16"	

\*Measurements shown are based on 4" x 4" posts & 2" x 4" rails. Measurements include expansion gap.

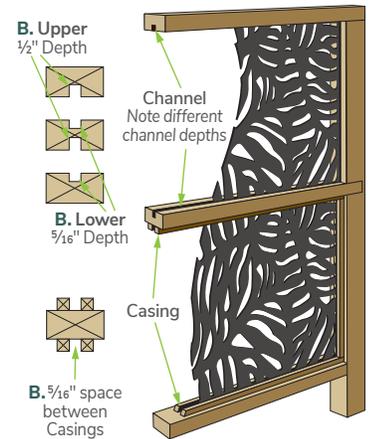


Fig. 26

## FRAME MEASUREMENTS, LUMBER & CONSTRUCTION

1. Plan frame size + post legs and footings (Figs. 27 & 30).
2. **Channel-Mount:** Router a 5/16" wide channel in all posts and rails. See specs for different channel depths (Figs. 26, 28 & 29).
3. **Casing-Mount:** Attach 1" x 1" border casing to all posts & rails (Figs. 26, 31 & 32).
4. Build frame laying on a flat surface. Square and level as you go.
5. Slide panels into channels/casings. No screws required. **Check that panels move freely in channels/casings in the 3/16" gaps at top and lateral sides for vertical and horizontal expansion.**
6. With a helper, lift frame into footing holes, check levelness, straighten vertically, and add post-hole concrete.

### Channel-Mount Style

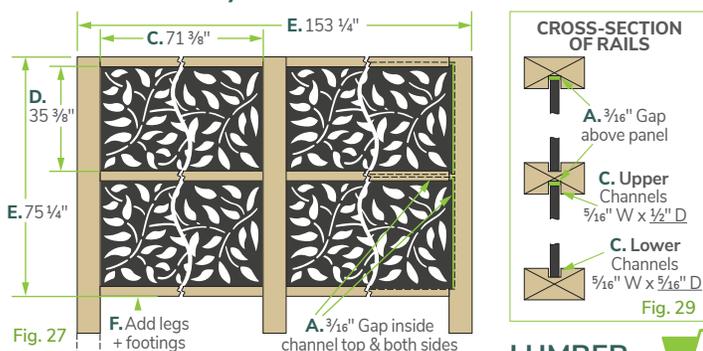


Fig. 27

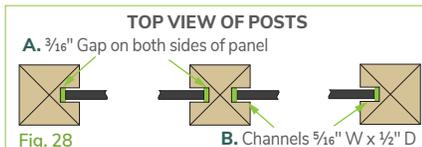


Fig. 28

### LUMBER

- Min. Lumber Size:**
- 4" x 4" Posts
  - 2" x 4" Rails
  - Need 5/16" (8mm) router bit

### Casing-Mount Style

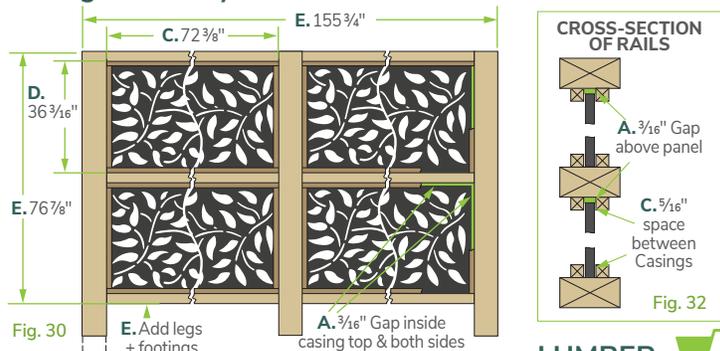


Fig. 30

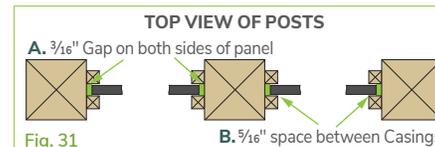


Fig. 31

### LUMBER

- Min. Lumber Size:**
- 4" x 4" Posts
  - 2" x 4" Rails
  - 1" x 1" Casings