



How to make photovoltaic panels flat

Can solar panels be installed on a flat roof?

Yes, you can absolutely install solar panels on flat roofs. In fact, flat roof installations often outperform sloped roof systems when properly designed and installed. The key is understanding that panels should never be installed completely flat against the roof surface.

Should solar panels be installed flat or sloped?

In fact, flat roof installations often outperform sloped roof systems when properly designed and installed. The key is understanding that panels should never be installed completely flat against the roof surface. Solar panels require a minimum tilt angle of 10 degrees to function optimally and maintain manufacturer warranties.

Which solar panels are best for a flat roof?

Tilt legs are suitable for flat roofs since they angle panels more perpendicular to the sun. Ballast systems are always popular since they do not require drilling into the roof. Flat solar panels are an excellent option for homes with a flat roof. These panels are easy to install and can mount in various ways.

Are flat solar panels a good option for utility-scale solar projects?

While flat PV panels can be installed at a lower cost and with lower degradation rates, there are disadvantages to consider for utility-scale solar projects. When solar panels are installed flat to the ground with no trackers, they are not tilted to the optimal angle to absorb the most sunlight throughout the day.

Deploying solar panels on flat roofs requires meticulous planning and execution to maximize energy yield and ensure structural integrity. This guide outlines professional best practices for residential and ...

What are the advantages and drawbacks of installing flat solar photovoltaic (PV) panels without a fixed or tracker mounting structure?

Yes, you can absolutely install solar panels on flat roofs. In fact, flat roof installations often outperform sloped roof systems when properly designed and installed. The key is understanding that ...

To install solar photovoltaic panels on flat surfaces effectively, meticulous planning and execution are essential. 1. The choice of sturdy mounting systems is ...

Solar panels are one of the best ways to generate power and save money on your electric bill, but what if you have a flat roof? Can you still install solar panels on a flat roof? And if so, ...

In this article, we will explore all the basic information needed to successfully design and install a PV system on a flat roof. From the choice of materials to the optimal arrangement of solar panels, we will ...

Learn how to install PV panels on flat roofs efficiently and effectively. This guide provides insights on mounting systems, benefits, and installation tips.

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Minimal Sunlight Capture: Flat-mounted solar panels capture less sunlight compared to tilted panels, especially in non-equatorial regions, resulting in lower energy production.

What Are The Advantages of Flat PV Panels?What Are The Disadvantages of Flat PV Panels?Optimize Your Solar Plant Design with RatedpowerInstalling flat panels rather than ground-mounted systems has significant advantages for solar project developers. See more on ratedpower [#b_results](#) [li.b_ans.b_mop.b_mopb](#), [#b_results](#)

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.mc_vtvc_meta
.mc_vtvc_title{color:var(--smtc-ctrl-link-foreground-brand-rest);font:var(--bing-smtc-text-global-body2);heig
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.mc_vtvc_meta_block_area .mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before,#serpvidans.vsacf
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.mc_vtvc_meta_block
.mc_vtvc_meta_pubdate{color:var(--bing-smtc-foreground-content-neutral-tertiary);padding-bottom:0}.vsacf
.mc_cwvc .mc_vtvc_con_rc,.vsacf .mmlist .mc_vtvc_con_rc{display:flex}.vsacf .mc_cwvc .mc_vtvc_con_rc
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.mmtitle{font:var(--bing-smtc-text-global-subtitle1-strong);margin-bottom:0}.vsacf .b_title .mmtitle
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.mc_vtvc_con_rc,#serpvidans.vsacf .cardless.mmlist .mc_vtvc_th{height:auto}"#serpvidans.vsacf
.vsb_tr_c.va_tt{margin:0}"#serpvidans.vsacf .vtbc .mv_vtvc_play,#serpvidans.vsacf .vtbc
.mv_vtvc_play_ext{position:static}"#serpvidans.vsacf .va_tt
.mc_vtvc_ban_lo{display:block}"#serpvidans.vsacf
.mc_bc{width:auto;border-radius:var(--smtc-ctrl-badge-sm-corner);padding:var(--smtc-padding-ctrl-text-side)
var(--smtc-gap-between-content-xx-small)}#serpvidans.vsacf .rmts .mc_bc
ems{display:none}"#serpvidans.vsacf a.vsb_tr_t{color:var(--smtc-foreground-content-neutral-primary)}.vsacf
.va_tt .vsb_tr_chd .mc_vtvc_th_dock.rmouseover{height:36px}.vsacf .va_tt .vsb_tr_chd
.mc_vtvc_th_dock{height:92px;position:absolute;bottom:0;background:linear-gradient(180deg,var(--bing-smt
c-background-ctrl-fade-on-image-stop-0) 0%,var(--mai-smtc-background-ctrl-on-image-rest) 100%)}.vsacf
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.mc_vtvc_title{color:var(--mai-smtc-foreground-ctrl-on-image-rest)}.vsacf
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0;height:16px}"#serpvidans.vsacf .vsb_tr_chd .mc_vtvc_tot .mc_vtvc_title
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.slide:not(:first-child){margin-left:var(--smtc-gap-between-content-small)}#serpvidans.vsacf .va_tt
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.b_module_expansion_control .b_btnContainer .b_CompactExpansion
.b_CompactExpansionBtnText{font:var(--bing-smtc-text-global-caption1-strong);color:var(--bing-smtc-foregr
ound-content-brand-rest)}#serpvidans.vsacf .b_module_expansion_control .b_btnContainer
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.mc_vtvc_meta_block_area{color:#666}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
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.mc_vtvc{background-color:unset}.mmtitle>a{display:block}.mc_fh{height:100%;border-radius:6px}.mc_tc_
bs{overflow:hidden}.mmlist .mc_vtvc .mc_vtvc_meta { padding: 12px 16px 16px 16px; } .mmlist .mc_vtvc
.mc_vtvc_meta_w { height: 112px; margin-top: -0px; } .mmlist .mc_vtvc .mc_vtvc_title { height: 44px;
line-height: 22px; margin-bottom: 0px; margin-top: 0px; } .mmlist .mc_vtvc .mc_vtvc_meta_block_area {
height: 40px; } .mmlist .mc_vtvc .vtmu, .mmlist .mc_vtvc .vtpl { bottom: 120px; } .mmlist .mc_vtvc_th_dock
{ height: 112px; } .mmlist .mc_vtvc_th .cico { height: 131px; }
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rgba(0,0,0,.05);line-height:0;margin:0;position:relative;border-radius:6px;overflow:hidden}.mc_vtvc.noshado
w{box-shadow:none}.mc_vtvc_con_rc{border-radius:6px;overflow:hidden;position:relative}.mc_vtvc>a{colo
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p:0;left:0}.mc_vtvc_th{background-color:#d5d5d5;position:relative}.mc_vtvc_th
.cico{border-radius:0}.mc_vtvc_ban_lo,.mc_vtvc_ban_up{position:absolute;vertical-align:middle}.mc_vtvc_
ban_lo{bottom:0}.mc_vtvc_ban_up{top:0}.mc_vtvc_title{font-weight:normal;margin-bottom:11px;overflow:
hidden;color:#111;height:54px;line-height:18px}.mc_vtvc_title
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a:hover{text-decoration:underline}.mc_vtvc_src_ico{float:left;margin-right:4px}.mc_vtvc_act{height:16px;m
argin-top:-40px;padding:12px
8px;z-index:1}.mc_vtvc_actc{right:16px;bottom:16px;position:absolute;display:inline-block;z-index:1}.mc_v

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tvc_act_sep{border-top:1px          solid          #d5d5d5;height:40px;margin:0          8px}.mc_vtvc_fh
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ock;padding:2px          8px;font:11px/14px
Arial;border-radius:2px;text-transform:uppercase;height:15px;width:26px;position:absolute;left:8px;top:110p
x}.isvctrl          .isv
.mc_vtvc_ban_up{left:0;right:initial}.mc_vtvc_ban_lo,.mc_vtvc_ban_up{right:0}.vt_text.b_lRight
.b_lLeft{margin:0          0          0          1px;height:14px;line-height:14px;padding:2px
8px;background:rgba(0,0,0,.75);border-radius:2px;font-weight:bold}.mc_vthtb{width:100%;height:100%;bac
kground:rgba(0,0,0,.7);position:absolute;top:0;bottom:0;left:0;right:0;display:table}.mc_vtht{width:100%;pad
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ontain;position:absolute;margin:auto;bottom:0;top:0;left:0;right:0;box-shadow:none;border-radius:0}.mc_vtvc
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.vtpl{bottom:137px}.svarht          #mmcar          .mc_vtvc          .vtmu,.svarht          #mmcar          .mc_vtvc
.vtpl{top:8px;left:8px}.mc_vtvc_center_play{background-image:url(data:image/svg+xml,%3Csvg%20width
%3D%2232%22%20height%3D%2232%22%20viewBox%3D%220%200%2032%2032%22%20fill%3D%22
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20fill-opacity%3D%220.6%22%2F%3E%0D%0A%20%20%20%20%3Cpath%20d%3D%22M14.2354%201
0.1923C13.2355%209.62986%2012%2010.3524%2012%2011.4997V20.5C12%2021.6472%2013.2355%202
2.3698%2014.2354%2021.8073L22.2356%2017.3073C23.2551%2016.7339%2023.2551%2015.2661%2022.
2357%2014.6926L14.2354%2010.1923Z%22%20fill%3D%22white%22%20fill-opacity%3D%220.9%22%2
F%3E%0D%0A%3C%2Fsvg%3E)}.mmlist          .mc_vtvc{margin:10px          1px          0}.mmlist
.mc_vtvc_con_rc{display:flex}.cardless          .mmlist          .mc_vtvc_con_rc{height:112px}.mmlist          .mc_vtvc
.mc_vtvc_meta{display:flex;flex-direction:column;justify-content:space-between;margin:0          10px          4px
12px;padding:0}.mmlist
.mc_vtvc_title{font-weight:400;font-size:16px;height:44px;line-height:22px;margin-bottom:0;margin-top:0;c
olor:unset}.mmlist          .mc_vtvc_meta_row{font-size:13px}.mmlist          .mc_vtvc

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.mc_vtvc_meta_block_area{height:unset}.mmlist .mc_vtvc .vtmu,.mmlist .mc_vtvc
.vtpl{bottom:8px}.cardless .mmlist .mc_vtvc{box-shadow:none}.cardless.mmlist
.mc_vtvc_center_play{width:32px;height:32px}.cardless.mmlist
.mc_vtvc_title{font-size:16px;color:unset}.cardless.mmlist
.mc_vtvc_meta_row{line-height:20px}.cardless.mmlist
.mc_vtvc_meta_pubdate{padding-bottom:2px;color:#666}.cardless.mmlist .mc_vtvc_th,.cardless.mmlist
.mc_vtvc_th .cico,.cardless.mmlist .mc_vtvc_th div.rms_img{border-radius:6px}.cardless.mmlist
.mc_vtvc_th{height:111px}.cardless.mmlist
.mc_vtvc_htc{border-radius:6px;overflow:hidden}#serpvidans.vasac.cardless{box-shadow:none}.cardless.m
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ght:18px;position:relative;width:100%}.mc_vtvc_meta_block{bottom:0;position:absolute;width:100%}.mc_v
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tvc_meta_block a{color:#444}.b_dark
.mc_vtvc_meta_block{color:#edebe9}.mc_vtvc_meta_row>:nth-of-type(n+2)::before{content:"
"}.mc_vtvc_meta_row .mc_vtvc_meta_row_channel::before{content:"
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.mc_vtvc_title{visibility:hidden}.mc_vtvc_con_rc.onhov
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.b_factrow{line-height:17px;font-size:11px;max-height:34px;overflow:hidden;text-overflow:ellipsis;padding:
0 16px 0 0;color:#444}.mc_vtvc_meta
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sition:relative}.mc_vtvc_meta_bg_w,.mc_vplvc_meta_bg_w{height:100%;width:100%;overflow:hidden;posit
ion:absolute;top:0}.mc_vtvc_meta_bg_w .cico,.mc_vplvc_meta_bg_w
.cico{border-radius:0;overflow:visible}.dg_u .mm_vidch_th_c{overflow:visible}.dg_u .mm_vidch_th_bg
img{margin-top:-20px}.emptyStyleForDebuggingPurpose{top:0}.mc_vtvc_meta_w
.mc_vtvc_meta{background:rgba(255,255,255,.75)}.mc_vtvc_meta_bg_w img,.mc_vtvc_meta_bg_w
.mc_vtvc_cb_w{filter:blur(25px);transform:scale(1.2)}body{--video-metadata-channel-color:#3c3c3c}body.b
_dark{--video-metadata-channel-color:unset}.vsarf .mc_vtvc_meta_pubdate{color:unset}.vsarf
.mc_vtvc_meta_channel{color:var(--video-metadata-channel-color)}.vsarf .mc_vtvc .mc_vtvc_meta_w
.mc_vtvc_title,.vsarf .mc_vtvc .mc_vtvc_meta_w .mc_vtvc_title strong{font-weight:bold}.vsarf
.mc_vtvc_meta_w .mc_vtvc_meta_row{font-size:13px}.emptyStyleForDebuggingPurpose{top:0}.vsarf
.mc_vtvc_th
.cico{height:132px}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.empt
```

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yStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurp
ose{top:0}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.mmsi{height:1
6px;width:16px;position:relative;top:5px;padding-right:var(--smtc-gap-between-content-xx-small)}.mmsi-mic
rosoftnews,.mmsi-msn{top:3px}.vrhdata{display:none}.mmgrid>div{width:197px;display:inline-block;margi
n-right:8px;margin-bottom:8px;box-shadow:0 0 0 1px
rgba(0,0,0,.05);position:relative;vertical-align:top;overflow:hidden;white-space:normal;border-radius:6px}.vs
arr .mmgrid>div,.vsarr1stbig .mmgrid>div{margin-right:8px;margin-bottom:8px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta{height:auto}#serpvidansrr .mc_vtvc
.mc_vtvc_title{display:-webkit-box;-webkit-line-clamp:2;-webkit-box-orient:vertical}.mmgrid
.mc_tc{border:0}.vsa .mmgrid>div:nth-child(3n){margin-right:0}.vsa
.b_moreLink{padding-top:4px}#serpvidansrr
.mc_vtvc_meta_row{line-height:18px;font-size:100%;height:17px}.vsarr
.mmgrid>div:nth-child(2n){margin-right:0}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:128px}.vsarr1stbig .mmgrid>div:nth-child(2){margin-right:0}#serpvidansrr.uipolish
.mc_vtvc_meta_pubdate,#serpvidansrr.uipolish .mc_vtvc_meta_channel,#serpvidansrr.uipolish #vidans2
.b_videocard .video_metadata .video_source{color:#767676}#serpvidansrr #vidans2 .b_videocard
.video_metadata_container,#serpvidansrr #vidans2 .b_videocard .video_metadata_container
.video_metadata>h3{width:100%}@media(max-width:1362.9px){#serpvidansrr
.mmgrid>div{width:168px;height:206px}#serpvidansrr .mmgrid>div .cico,#serpvidansrr .mmgrid>div .cico
.rms_img{width:168px;height:100px}#serpvidansrr .mc_vtvc .mc_vtvc_meta{padding:12px}#serpvidansrr
.mc_vtvc .mc_vtvc_title{height:32px;line-height:16px;margin-bottom:16px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta_block_area{height:34px}#serpvidansrr
.mc_vtvc_meta_row{line-height:15px;font-size:13px;height:15px}#serpvidansrr
.mc_vtvc_meta_pubdate{padding-bottom:4px}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:114px}#serpvidansrr #vidans2 .b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard
.videoPlayer .cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico
.rms_img{width:343px!important;height:194px!important;margin-right:0} }@media(max-width:1274.9px){#s
erpvidansrr .mmgrid>div{width:124px;height:164px}#serpvidansrr .mmgrid>div .cico,#serpvidansrr
.mmgrid>div .cico .rms_img{width:124px;height:76px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta{padding:8px}#serpvidansrr .mc_vtvc
.mc_vtvc_title{height:32px;line-height:16px;margin-bottom:12px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta_block_area{height:28px}#serpvidansrr
.mc_vtvc_meta_row{line-height:13px;font-size:11px;height:13px}#serpvidansrr
.mc_vtvc_meta_pubdate{padding-bottom:2px}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:96px}#serpvidansrr #vidans2 .b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard
.videoPlayer .cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico
.rms_img{width:256px!important;height:144px!important;margin-right:0}#serpvidansrr .maskthumb
.mc_bc_w{padding:8px 4px 4px 8px}#serpvidansrr.withsplitline
.mmgrid>div:nth-last-child(1),#serpvidansrr.withsplitline
.mmgrid>div:nth-last-child(2){margin-bottom:24px}#serpvidansrr.withsplitline .mmgrid{border-bottom:1px
solid #ecec; margin-bottom:16px}#serpvidansrr #vidans2 .b_videocard

```

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```
.video_metadata{max-width:auto;padding:12px 16px}#serpvidansrr #vidans2
.b_videocard{margin-bottom:12px;box-shadow:0 0 1px rgba(0,0,0,.05),0 2px 3px
rgba(0,0,0,.1);border-radius:6px}#serpvidansrr .b_rich{padding-top:0}#serpvidansrr #vidans2
.videoPlayer{border-radius:6px 6px 0 0;overflow:hidden}#serpvidansrr #vidans2 .b_videocard
.video_metadata>h3{white-space:nowrap;overflow:hidden;text-overflow:ellipsis;-webkit-line-clamp:1;line-he
ight:15px;height:15px;font-size:13px;color:#000;margin-bottom:20px;font-family:Arial,Helvetica,Sans-Serif;f
ont-style:normal;display:block}#serpvidansrr.vsarr1stbig #vidans2 .b_videocard .video_metadata
.actionmenu{display:none}#serpvidansrr #vidans2 .b_videocard .video_summary,#serpvidansrr #vidans2
.b_videocard .video_source{line-height:15px}#serpvidansrr #vidans2 .b_videocard .videoPlayer
.vtbc{right:0}.vrhc line.nhvpv .pffvi,.vrhc line.nhvpv[data-tps="S"] .pffvt,.vrhc line.nhvpv[data-tps="M"]
.pffvt,.vrhc line.nhvpv[data-tps="L"] .pffvt{display:inline-flex}.vrhc line.nhvpv .vrhtc.pffv
.vrhc{display:none}.vrhc line.nhvpv .vrhtc.pffv
.player_ol{background:var(--mai-smtc-background-ctrl-on-image-hover);transition:background-color
.5s;display:flex;align-items:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);ga
p:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.mc_vtvc_th img{transition:all .3s
ease-out}.nhvpv+.mc_vtvc_th
img{transform:scale(1.1)}.smtplayerhtml5{height:100%;width:100%;overflow:hidden}.smtplayerhtml5
video{min-height:100%;min-width:100%}.smtplayerhtml5
.videoplaying{background-color:#000}.smtplayerhtml5.hide{display:none}.pffvt{display:none;color:var(--ma
i-smtc-foreground-ctrl-on-image-rest);font:var(--bing-smtc-text-global-subtitle2-strong)}.pffvi{mask:url(/rp/ui
07wU6K7FR_inzG7DRbP1i8fGo.svg) center
no-repeat;mask-size:12px;background:var(--bing-smtc-background-card-on-image-default);width:20px;height
:20px;flex-shrink:0;align-self:flex-start}[data-tps="L"]
.pffvt{font:var(--bing-smtc-text-global-subtitle2-strong)}[data-tps="L"]
.pffvi{width:22px;height:22px;mask-size:16px}[data-tps="S"] .pffvt{font-size:0}[data-tps="S"]
.pffvi{width:24px;height:24px;mask-size:24px;align-self:center}.hvpv.h5s
.pffvt{display:inline-flex}.hvpv.h5s .vrhtc.pffv .vrhc{display:none}.hvpv.h5s .vrhtc.pffv
.player_ol{background:var(--mai-smtc-background-ctrl-on-image-hover);transition:background-color
.5s;display:flex;align-items:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);ga
p:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.pffvt{text-decoration:underline}.vrhc
.vrhc{position:absolute;width:100%;height:35px;max-height:35px;bottom:0;left:0;padding:0;background:non
e;display:block;z-index:9}.vrhc .vrhc.hide,.vrhc .vrhc .vrhc
.hide{display:none}.vrhc{white-space:nowrap;text-overflow:ellipsis;overflow:hidden;display:inline-block;po
sition:absolute;max-width:240px;height:18px;line-height:14px;margin-left:8px;top:10px;left:0;right:0;border-
radius:2px;padding-right:8px}.vrhc div{display:inline-block}.vrhc
nt{color:#fff;font-size:11px;font-weight:bold;background-color:rgba(0,0,0,.75);padding:2px
8px;margin-left:0;top:0;box-sizing:border-box;position:relative}.vrhc
.ricons{position:absolute;right:8px;top:10px;left:auto;bottom:auto;height:18px;display:inline-block;cursor:poi
nter}.vrhc.icons_1 .vrhc{margin-right:27px}.vrhc.icons_2 .vrhc{margin-right:49px}.vrhc.icons_3
.vrhc{margin-right:79px}.vrhc .vrhc
nt,.vsb_tr_chd .vrhc.icons_1
.vrhc{margin-right:0}.vpb{position:absolute;display:block;bottom:0;left:0;height:4px}.vpb
```

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```
div{position:absolute}.vpb
nt.test{display:none}.vpb.back{background-color:#999}.vrhcbp
.vrhol.npb{height:36px;max-height:36px}.vrhol
.vadda{width:22px;height:18px;padding:0;margin-right:0;margin-left:2px;bottom:0;position:relative;display:i
nline-block;z-index:1;background:rgba(0,0,0,.75);border-radius:2px;overflow:hidden}.vrhol
.vadda.hide{display:none}.vrhol .vadda .mc_vfaa{margin:3px 5px}.ricons .vol{float:left}.ricons
.adultFlag{float:right}.vol{width:22px;height:18px;bottom:0;margin-left:1px;margin-right:1px;position:relati
ve;display:inline-block}.vol.hide,.vol .hide{display:none}.vol
.bg{background:rgba(0,0,0,.75);border-radius:2px}.vol.bg,.vol nt{position:absolute;bottom:0}.vol
.vol.bg.volnb{border-radius:0 0 2px 2px}.vol .volsliderHandle.bg{border-radius:2px 2px 0 0}.vol nt
.volsliderHandle{height:70px;display:none;width:22px;float:left;bottom:18px;position:absolute;display:block
}.vol nt .volsliderHandle.hide{display:none}.volsliderHandle
.vsb{height:54px;width:4px;background-color:#999;margin:9px auto
8px;position:relative;display:block;border-radius:2px}.volsliderHandle
.vsh{height:6px;width:14px;padding:9px 7px 9px 7px;margin:0
-12px;display:block;position:absolute;top:30px}.volsliderHandle .vsh.hide{display:none}.volsliderHandle
.vshi{height:4px;width:14px;background-color:#fff;border-radius:2px}.volMuteIcon{width:16px;height:14px;
margin:2px
4px;float:left}.volMuteHandle{width:22px;height:18px}.vo{background:url(/rp/ffZxBXEIP9WYOO0jhTaEl
yLhEVU.svg) no-repeat}.vm{background:url(/rp/fsX-ZVd03wB2TL0vmQJxSp4U9vs.svg)
no-repeat}.vl{background:url(/rp/YXYMPC1Rry_XJGc7Yg8lR4B2eEs.svg)
no-repeat}.vf{background:url(/rp/NosrlR4amKTs1zYxWy3laZN3HRk.svg)
no-repeat}@media(forced-colors:active){.vol{forced-color-adjust:none}}.vrhc line .vt_vp,.vrhc.popout
.vt_vp,.vrhc.mousefollow
.vt_vp{position:absolute;bottom:0;border:hidden;padding:0;top:0;left:0;z-index:3}.vrhtc
.hide{display:none}.vrh_clc .vt_vp,.vrh_clc .vrhtc .vrhi,.vrh_clc .player_ol{cursor:pointer}.vrh_clc
.cico{border-radius:0}.vrhtc{border:hidden;top:0;left:0;padding:0}.vrhc.mousefollow .vrhtc,.vrhc.popout
.vrhtc{background-color:#999}.vrhtpc.load
.player_ol{background:url(/rp/J_o2maogFDeUOsovPJL-ofEuxJ4.gif) center center no-repeat}.vrhc line .vrhtc
.vrhi,.vrhc.popout .vrhtc .vrhi,.vrhc.mousefollow .vrhtc
.vrhi{position:absolute!important;border:hidden;z-index:2;padding:0;left:0;top:0}.player_ol{position:absolute
;width:100%;height:100%;bottom:0;border:hidden;z-index:7}.vrhc.popout,.vrhc
line,.vrhc.mousefollow{border-radius:6px;overflow:hidden;display:table-row-group;background:none}.vrhc.p
opout,.vrhc.mousefollow{z-index:4;box-shadow:0 4px 4px rgba(0,0,0,.1),0 2px 80px rgba(0,0,0,.2)}.vrhc
line{z-index:1;margin:0}.vrhc.popout,.vrhc line{position:absolute;top:0}.vrhc.popout{border:1px solid
#fff}.vrhc.mousefollow{position:fixed}.vrhcbp{position:relative;top:0;left:0;display:table-row}.vrhcbp
.vrhtc{position:relative;overflow:hidden}.vrhc.hide{display:none}@keyframes
vh_fadein{from{opacity:0}to{opacity:1}}.vrhc.not(.hide){animation:vh_fadein 250ms}.vrhc line
img{color:transparent}.vrhc
line.fullsize{height:100%}.vrhc,.vrhc: hover,.vrhc: link,.vrhc: active,.vrhc: visited{color:#000;text-decoration:no
ne}.vrhc.vrh_clc{cursor:pointer}a.hover-anchor{display:block;height:100%;width:100%;text-decoration:none
```

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.vrhstat{height:0;overflow:hidden}Videos of How To Make Photovoltaic Panels FlatWatch video on paradisesolarenergy Installing Solar Panels On A Flat Roof | Paradise Energyparadisesolarenergy Apr 15, 2021Watch video on energy.govSolar Photovoltaic Technology Basicsenergy.govOct 30, 2020Watch video on todayshomeowner Complete Solar Panel Installation Guide - Today's Homeownertodayshomeowner Nov 15, 2024Watch full video.iacfm

.iacf_head{display:flex;align-items:center;gap:var(--smtc-gap-between-content-small);text-decoration-color:var(--smtc-foreground-content-neutral-primary);box-sizing:border-box;margin-bottom:var(--smtc-gap-between-content-x-small)}.iacfm .iacf_head span{flex:1 1 0;white-space:nowrap;text-overflow:ellipsis;overflow:hidden;color:var(--smtc-foreground-content-neutral-primary);font:var(--bing-smtc-text-global-body3-strong)}.iacfm .iacf_head div{display:flex;height:22px;width:22px;justify-content:center;align-items:center;transition:background 300ms ease-out;margin-right:-3px;border-radius:var(--mai-smtc-corner-list-card-default);overflow:hidden}.iacfm .iacf_head .iacf_chv{color:var(--smtc-foreground-content-neutral-primary)}[dir="rtl"] .iacfm .iacf_head svg{transform:scaleX(-1)}#b_content .iacfic.mmkiaacf .iacfmit .imgInfo{color:var(--smtc-ctrl-link-foreground-brand-rest)}#b_content .iacfic.mmkiaacf .iacfmit a{text-decoration-color:var(--smtc-ctrl-link-foreground-brand-hover)}#b_content .iacfic.mmkiaacf .iacfmit .imgInfo{font:var(--bing-smtc-text-global-body3)}#b_content .iacfic.mmkiaacf .iacf_crs[data-wptds-carousel]>div[data-wptds-carousel-scroll-container]{padding-bottom:52px}#b_content .iacfic.mmkiaacf .iacfmit{box-sizing:initial;padding-bottom:52px}#b_content .iacfic.mmkiaacf .iacfmit .imgInfo{text-overflow:ellipsis;display:-webkit-box;-webkit-line-clamp:2;-webkit-box-orient:vertical;align-self:stretch;padding:0 var(--smtc-gap-between-content-xx-small);overflow:hidden}#b_content .iacfic.mmkiaacf .iacfimgc{padding-bottom:var(--smtc-gap-between-content-x-small)}#b_content .acfImgAns .salink,#b_content .acfImgAns .iasalink{text-align:center;display:block;padding-bottom:var(--smtc-gap-between-content-medium)}#b_content .acfImgAns .salink: hover .iasabt,#b_content .acfImgAns .iasalink: hover .iasabt{background:var(--smtc-background-ctrl-neutral-hover)}#b_content .acfImgAns .salink: active .iasabt,#b_content .acfImgAns .iasalink: active .iasabt{background:var(--smtc-background-ctrl-neutral-pressed)}#b_content .acfImgAns .iasabt,#b_content .iaExp_chevron{height:initial;border-radius:var(--smtc-corner-circular);background:var(--bing-smtc-background-ctrl-neutral-rest);display:inline-block;position:relative;top:0;box-shadow:initial}#b_content .acfImgAns .iasatxt{font:var(--bing-smtc-text-global-caption1-strong);color:var(--bing-smtc-foreground-content-brand-rest);padding:var(--smtc-gap-between-content-x-small) var(--smtc-gap-between-content-small);display:flex;gap:var(--smtc-gap-between-content-x-small);justify-content:center;align-items:center}#b_content .acfImgAns .salink::before,#b_content .acfImgAns .iasalink::before{border-bottom:1px solid var(--smtc-stroke-ctrl-on-neutral-rest);width:100%;display:block;content:"";top:18px;position:relative}#b_content .acfImgAns .svg{vertical-align:top}#b_content .acfImgAns .svgpath{fill:var(--bing-smtc-foreground-content-brand-rest)}#b_content .acfImgAns .iachevron,#b_content .acfImgAns .svgicon{width:12px;height:12px;margin-left:0;position:relative;top:0}html[dir=rtl] #b_content

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```
.acfImgAns .iachevron,html[dir=rtl] #b_content .acfImgAns .svgicon{transform:scaleX(-1)}#b_content
.acfImgAns .rel_ent_w a.rel_ent{border:1px solid var(--smtc-stroke-ctrl-on-neutral-rest)}#b_content
.acfImgAns .iaheader
.iacf_head{text-decoration-color:var(--smtc-foreground-ctrl-neutral-primary-hover)}#b_content .acfImgAns
.iaheader .iacf_head span,#b_content .acfImgAns .iaheader .iacf_head
svg{color:var(--smtc-foreground-content-neutral-primary);forced-color-adjust:auto}#b_content
.iacfic.mmkiaacf .iacf_plan .cico{border-radius:var(--mai-smtc-corner-card-default)}#b_content
.iacfic.mmkiaacf .iacf_plan .cico img{border-radius:var(--mai-smtc-corner-card-default)}#b_content
.iacfic.mmkiaacf{overflow:visible;padding:0}#b_content .iacfic.mmkiaacf
.iacf_crsI[data-wptds-carousel]{margin:0;padding-bottom:var(--smtc-gap-between-content-medium)}#b_content
ent .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
[data-wptds-carousel-controls]{--wptds-carousel-control-opacity:1}#b_content .iacfic.mmkiaacf
.iacf_crsI[data-wptds-carousel]>div{padding:0}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
[data-direction="end"]{margin-right:-22px}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
[data-direction="end"] svg{transform:scaleX(-1)}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
[data-direction="start"]{margin-left:-22px}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
[data-direction="start"] svg{transform:scaleX(1)}#b_content .iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
button{background:var(--smtc-background-card-on-primary-default-rest);box-shadow:var(--bing-smtc-shadows-card-hover-3);width:36px;border-radius:var(--smtc-corner-ctrl-lg-rest)}#b_content .iacfic.mmkiaacf
.iacf_crsI[data-wptds-carousel]
button: hover{background:var(--smtc-background-card-on-primary-default-hover)}#b_content
.iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel]
button: active{background:var(--smtc-background-card-on-primary-default-pressed)}#b_content
.iacfic.mmkiaacf .iacf_crsI[data-wptds-carousel] button svg{transition:initial}#b_content .iacfic.mmkiaacf
.iacf_crsI[data-wptds-carousel] button svg
path{fill:var(--smtc-foreground-content-neutral-secondary);forced-color-adjust:auto}#b_content
.iacfic.mmkiaacf .iacfmit{position:absolute}#b_content .iacfic.mmkiaacf .iacfimgc{margin:auto}#b_content
.b_ans.b_imgansacf{padding:0!important}#b_content
.b_ans.b_top.b_imgansacf{background-color:initial!important}#b_content .acfImgAns .iaheader
.iacf_head{gap:0;padding:var(--smtc-gap-between-content-medium)
0;padding-inline-start:var(--mai-smtc-padding-card-default);display:flex;align-items:center;box-sizing:border-box}#b_content .acfImgAns .iaheader .iacf_head: hover{text-decoration:none}#b_content .acfImgAns
.iaheader .iacf_head: hover span{text-decoration:underline}#b_content .acfImgAns .iaheader .iacf_head: hover
.iacf_chv{background:initial}#b_content .acfImgAns .iaheader .iacf_head
div{display:flex;align-items:center;transition:background 300ms
ease-out;margin-right:-3px;border-radius:var(--smtc-corner-ctrl-rest);overflow:hidden;color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}#b_content .acfImgAns .iaheader .iacf_head
span{width:initial;flex:none;font:var(--bing-smtc-text-global-subtitle1-strong);max-width:90%;text-overflow:
ellipsis;white-space:nowrap;overflow:hidden}#b_content .acfImgAns .iaheader .iacf_head
.iacf_chv{width:22px;justify-content:center;height:22px}#b_content .acfImgAns
.rel_ent_w{margin-top:0}#b_content .acfImgAns .rel_ent_w .b_slideexp{margin:0}#b_content .acfImgAns
```

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```
.rel_ent_w      .btn.rounded{top:initial;margin-top:1px}#b_content      .acfImgAns      .rel_ent_w
.btn.next{right:-14px}#b_content      .acfImgAns      .rel_ent_w
.cr>div{width:36px;height:38px;border-radius:var(--smtc-corner-ctrl-lg-rest);background:var(--bing-smtc-bac
kground-container);box-shadow:var(--bing-smtc-shadows-card-hover-3);border:initial}#b_content
.acfImgAns      .rel_ent_w      .cr>div:after{margin-inline-start:2px;top:0}#b_content      .acfImgAns      .rel_ent_w
.b_viewport{padding-top:0;margin-left:0;padding-left:0}#b_content      .acfImgAns      .rel_ent_w      .b_viewport
.slide{height:38px;margin-left:0;margin-inline-end:var(--smtc-gap-between-content-x-small)}#b_content
.acfImgAns      .rel_ent_w
a.rel_ent{border-radius:var(--smtc-corner-circular);background:var(--smtc-background-card-on-primary-defau
lt-rest);padding-left:0;height:38px}#b_content      .acfImgAns      .rel_ent_w
a.rel_ent:hover{background:var(--smtc-background-ctrl-outline-hover)}#b_content      .acfImgAns      .rel_ent_w
a.rel_ent:active{background:var(--smtc-background-ctrl-outline-pressed)}#b_content      .acfImgAns      .rel_ent_w
.cico{margin:var(--smtc-gap-between-content-xx-small)      var(--smtc-gap-between-content-x-small)
var(--smtc-gap-between-content-xx-small)      var(--smtc-gap-between-content-xx-small)}#b_content      .acfImgAns
.rel_ent_w      .rel_ent_tw{font:var(--bing-smtc-text-global-caption1-strong)}#b_content      .acfImgAns      .rel_ent_w
.rel_ent_c{padding-left:0}#b_content      .acfImgAns      .rel_ent_w
.b_slidebar{padding-inline-start:var(--mai-smtc-padding-card-default)}#b_content      .acfImgAns      .rel_ent_w
.rel_ent_c
.rel_ent:first-child{margin-inline-start:var(--mai-smtc-padding-card-default);align-items:center}#b_content
.acfImgAns      .rel_ent_w      .rel_ent_t{max-width:250px}html[dir=rtl] #b_content      .acfImgAns      .iacf_head
svg{transform:scaleX(-1)}html[dir=rtl]      #b_content      .acfImgAns      .iacf_crsI[data-wptds-carousel]
[data-direction="end"]{transform:scaleX(-1)}html[dir=rtl]      #b_content      .acfImgAns
.iacf_crsI[data-wptds-carousel]
[data-direction="start"]{transform:scaleX(-1)}[data-vs-icon-template]{display:none!important}.iacf_vsicon{p
osition:absolute;top:12px;right:12px;width:28px;height:28px;background-color:var(--mai-smtc-background-ct
rl-on-image-rest);border-radius:var(--smtc-corner-circular);display:none;align-items:center;justify-content:cen
ter;border:1px      solid
var(--smtc-stroke-ctrl-on-neutral-rest);cursor:pointer;opacity:0;z-index:1000;box-sizing:border-box;pointer-ev
ents:none}.iacf_vsicon
acf-icon{color:var(--mai-smtc-foreground-ctrl-on-image-rest)}.iacf_vsicon.iacf_vsicon_show{display:flex;op
acity:1}acf-icon{display:block;inline-size:fit-content;max-inline-size:100%;pointer-events:none}acf-icon,acf-i
con::before,acf-icon::after,acf-icon      *,acf-icon      *::before,acf-icon
*::after{box-sizing:border-box;margin:0;padding:0}acf-icon[hidden],acf-icon
*[hidden]{display:none}acf-icon[data-visually-hidden],acf-icon
*[data-visually-hidden]{block-size:1px;inline-size:1px;margin:unset;padding:unset;border:0;clip:rect(0 0 0
0);clip-path:inset(50%);overflow:clip;position:absolute;white-space:nowrap}.acf-icon__def{display:none}.acf
-icon__icon{display:block;inline-size:auto;color:inherit}[dir="rtl"]
.acf-icon__icon{transform:scaleX(-1)}@media(forced-colors:active){acf-icon{color:ButtonText!important}}a
cf-icon[data-size="M"]      .acf-icon__icon{block-size:16px}.iacfm      .iacfmit      a:focus      .isp_imgcont      img,.iacfm
.iacfmit      a:focus      .iacfimgc      img,.iacfm      .iacfmit      a:focus      .iacf_smol{outline:3px      dotted
#1aebff;outline-offset:-5px}.iacfm      .iacfmit      .cico{position:relative}.iacfm      .iacfmit
```

How to make photovoltaic panels flat

```
.cico::after{ content:"";position:absolute;left:0;top:0;width:100%;height:100%;background:rgba(0,0,0,.03)}.gs
_card .iacfmit img,.b_wpt_container .iacfmit img,.b_acf_card .iacfmit img{transition:transform .3s
ease-out}.gs_card .iacfmit:hover .iacfimgc img,.b_wpt_container .iacfmit:hover .iacfimgc img,.b_acf_card
.iacfmit:hover .iacfimgc
img{transform:scale(1.1)}.iacfic{position:relative;height:100%;width:100%;background:#fff;overflow:hidden
;border-radius:inherit}.iacf_plan{position:relative}.iacfmit
.mimg{width:100%;height:100%;position:relative}.iacfic .iacfmit{position:absolute}.iacfic .iacfmit
.cico{border-radius:0}.iacfca{padding:var(--mai-smtc-padding-card-default);box-sizing:border-box;overflow:
hidden;border-radius:var(--mai-smtc-corner-card-default)}.iacfca .iacf_crsl
.iacfmit{overflow:hidden;position:relative}.iacfca .iacf_crsl .iacfmit
.cico{overflow:hidden;border-radius:var(--mai-smtc-corner-list-card-default)}.iacfca .iacf_crsl .iacfmit .cico
img{border-radius:inherit;transition:transform 300ms ease-out}.iacfca .iacf_crsl .iacfmit:hover .cico
img{transform:scale(1.1)}.iacfca .iacfmit a:focus,.iacfca .iacfmit a:focus img{outline:0}.iacfca .iacfmit
a:focus .cico::after{border-radius:inherit;box-shadow:inset 0 0 0 3px
var(--bing-smtc-background-card-on-primary-alt-rest);outline:2px solid
var(--smtc-foreground-content-neutral-secondary);outline-offset:-2px}.iacfca
[data-wptds-carousel][data-default][data-variant="Normal"]{margin:0
calc(-1*var(--mai-smtc-padding-card-default));height:auto}.iacfca
[data-wptds-carousel][data-default][data-variant="Normal"] [data-wptds-carousel-scroll-container]{padding:0
var(--mai-smtc-padding-card-default)}.iacfca [data-wptds-carousel][data-default][data-variant="Normal"]
[data-wptds-carousel-scroll-container] ol{width:fit-content;align-items:center}.iacfca
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="end"]{margin-right:24px}.iacfca
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="start"]{margin-left:24px}.iacfca
.iacf_pag{position:absolute;bottom:8px;left:50%;transform:translate(-50%,0)}.cards.large
.iacfca{height:200px}[dir="rtl"] .iacfca .iacf_pag{transform:translate(50%,0)}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control]{background:var(--bing-smtc-background-ctrl-neutral-rest);border:0;height:56px
;width:16px;transition:width .3s;background
.3s;color:var(--smtc-foreground-ctrl-neutral-primary-hover)}.iacfm.iacfca .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control] svg{transition:transform .3s}.iacfm.iacfca .iacf_crsl[data-wptds-carousel]
[data-wptds-carousel-control]:hover{width:24px;background:var(--smtc-background-ctrl-neutral-hover)}.iacf
m.iacfca .iacf_crsl[data-wptds-carousel] [data-wptds-carousel-control] path{fill:currentColor}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel] ol [data-direction="start"]{border-radius:0 8px 8px
0;margin-left:16px}.iacfm.iacfca .iacf_crsl[data-wptds-carousel] ol [data-direction="start"]
svg{transform:scale(.7)}.iacfm.iacfca .iacf_crsl[data-wptds-carousel] ol [data-direction="start"]:hover
svg{transform:scale(1)}.iacfm.iacfca .iacf_crsl[data-wptds-carousel] ol
[data-direction="end"]{border-radius:8px 0 0 8px;margin-right:16px}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel] ol [data-direction="end"] svg{transform:scale(-.7)}.iacfm.iacfca
.iacf_crsl[data-wptds-carousel] ol [data-direction="end"]:hover svg{transform:scale(-1)}.iacfm.iacfca.iacf_fb
```

How to make photovoltaic panels flat

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.iacf_crs1[data-wptds-carousel] [data-wptds-carousel-control],.iacfm.iacfca.iacf_ss
.iacf_crs1[data-wptds-carousel]
[data-wptds-carousel-control]{background:var(--mai-smtc-background-ctrl-on-image-rest);color:var(--mai-sm
tc-foreground-ctrl-on-image-rest)}.iacfm.iacfca.iacf_fb .iacf_crs1[data-wptds-carousel]
[data-wptds-carousel-control] path,.iacfm.iacfca.iacf_ss .iacf_crs1[data-wptds-carousel]
[data-wptds-carousel-control] path{fill:currentColor}.iacfca .iacf_colg_crs1
[data-wptds-carousel-list]{width:fit-content}.iacfca .iacf_colg_crs1 .iacfmit{position:absolute}.iacfca
.iacf_colg_crs1
.cico{border-radius:0}.iacfca:not(.iacfh):has(>.iacf_colg_crs1){height:100%;width:100%;padding:0;overflow:
hidden;border-radius:inherit}.iacfca:not(.iacfh):has(>.iacf_colg_crs1)
.iacfmit{border-radius:0}.iacfca:not(.iacfh):has(>.iacf_colg_crs1) [data-wptds-carousel][data-default]
[data-wptds-carousel-controls]{inline-size:calc(100% + var(--wptds-carousel-control-size) -
var(--mai-smtc-padding-card-default)*2);transform:translateX(calc(0rem +
var(--mai-smtc-padding-card-default) - (var(--wptds-carousel-control-size)/2)))
translateY(-50%)}[data-wptds-carousel][data-default],[data-wptds-carousel][data-default]::before,[data-wptds-
carousel][data-default]::after,[data-wptds-carousel][data-default] *,[data-wptds-carousel][data-default]
*::before,[data-wptds-carousel][data-default]
*::after{box-sizing:border-box;margin:0;padding:0}[data-wptds-carousel][data-default][hidden],[data-wptds-c
arousel][data-default]
[hidden]{display:none}[data-wptds-carousel][data-default][data-visually-hidden],[data-wptds-carousel][data-d
efault] [data-visually-hidden]{block-size:.0625rem;border:0;clip:rect(0 0 0
0);inline-size:.0625rem;margin:-.0625rem;overflow:hidden;padding:0;position:absolute}[data-wptds-carousel]
[data-default]{--wptds-carousel-control-bg-color:#fff;--wptds-carousel-control-border-color:#ddd;--wptds-car
ousel-control-box-shadow:0rem .125rem .1875rem
rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#767676;--wptds-carousel-control-size:2rem;display:block;po
sition:relative;block-size:100%}[data-wptds-carousel][data-default]
[data-wptds-carousel-scroll-container]{overflow-x:auto;overflow-y:clip;scroll-behavior:smooth;block-size:10
0%;-ms-overflow-style:none;scrollbar-width:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-scroll-container]::-webkit-scrollbar{display:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-scroll-container]:focus-visible{outline-color:Highlight;outline-color:-webkit-focus-ring-
color;outline-offset:.0625rem;outline-style:auto;outline-width:.0625rem}[data-wptds-carousel][data-default]
[data-wptds-carousel-list]{display:flex;gap:.5rem;list-style:none;block-size:100%}[data-wptds-carousel][data-
default] [data-wptds-carousel-list]>{*flex-grow:0;flex-shrink:0}[data-wptds-carousel][data-default]
[data-wptds-carousel-list]>:not([data-wptds-carousel-item]){display:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-item]{block-size:100%}[data-wptds-carousel][data-default]
[data-wptds-carousel-item]>{*block-size:100%}[data-wptds-carousel][data-default]
[data-wptds-carousel-item]>img{display:block;inline-size:auto}[data-wptds-carousel][data-default]
[data-wptds-carousel-controls]{list-style:none;position:absolute;inline-size:calc(100% +
var(--wptds-carousel-control-size));inset-block-start:50%;transform:translateX(calc(0rem -
(var(--wptds-carousel-control-size)/2)))
translateY(-50%);display:flex;align-items:center;justify-content:space-between;pointer-events:none}[data-wpt
```

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```
ds-carousel][data-default]
[data-wptds-carousel-controls]>{*{flex-grow:0;flex-shrink:0}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]{cursor:pointer;inline-size:var(--wptds-carousel-control-size);aspect-ratio:1;displ
ay:grid;place-content:center;border-radius:50%;background-color:var(--wptds-carousel-control-bg-color);bord
er:.0625rem solid
var(--wptds-carousel-control-border-color);box-shadow:var(--wptds-carousel-control-box-shadow);color:var(-
-wptds-carousel-control-fg-color);opacity:var(--wptds-carousel-control-opacity);pointer-events:all}[data-wptd
s-carousel][data-default]
[data-wptds-carousel-control]:active{--wptds-carousel-control-bg-color:#fff;--wptds-carousel-control-border-c
olor:#ddd;--wptds-carousel-control-box-shadow:0rem .125rem .1875rem
rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#767676}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]:focus-visible{outline-color:Highlight;outline-color:-webkit-focus-ring-color;out
line-offset:.0625rem;outline-style:auto;outline-width:.0625rem}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]*{pointer-events:none}[data-wptds-carousel][data-default]
[data-wptds-carousel-control]>svg{display:block}[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="start"]>svg{transform:scaleX(1)}[data-wptds-carousel][data-de
fault]
[data-wptds-carousel-control][data-direction="end"]>svg{transform:scaleX(-1)}[data-wptds-carousel][data-de
fault]
[data-wptds-carousel-control][aria-disabled="true"]{visibility:hidden;cursor:not-allowed}[data-wptds-carousel
][data-default]
[data-wptds-carousel-announce]{block-size:.0625rem;border:0;clip:rect(0 0 0
0);inline-size:.0625rem;margin:-.0625rem;overflow:hidden;padding:0;position:absolute}[data-wptds-carousel]
[data-default][data-variant="Normal"],[data-wptds-carousel][data-default][data-variant="FullWidth"]{--wptds
-carousel-control-opacity:0}[data-wptds-carousel][data-default][data-variant="Normal"]:has([data-wptds-caro
usel-scroll-container]:focus-visible),[data-wptds-carousel][data-default][data-variant="Normal"]:has([data-wpt
ds-carousel-control]:focus-visible),[data-wptds-carousel][data-default][data-variant="FullWidth"]:has([data-w
ptds-carousel-scroll-container]:focus-visible),[data-wptds-carousel][data-default][data-variant="FullWidth"]:h
as([data-wptds-carousel-control]:focus-visible){--wptds-carousel-control-opacity:1}[data-wptds-carousel][dat
a-default][data-variant="Normal"][data-snap]
[data-wptds-carousel-scroll-container]{scroll-snap-type:x
proximity}[data-wptds-carousel][data-default][data-variant="Normal"][data-snap]
[data-wptds-carousel-item]{scroll-snap-align:center;scroll-snap-stop:always}[data-wptds-carousel][data-defau
lt][data-variant="Normal"][data-snap]
[data-wptds-carousel-item]:first-of-type{scroll-snap-align:start}[data-wptds-carousel][data-default][data-aria
nt="Normal"][data-snap]
[data-wptds-carousel-item]:last-of-type{scroll-snap-align:end}[data-wptds-carousel][data-default][data-variant
="FullWidth"]
[data-wptds-carousel-scroll-container]{scroll-snap-type:x
mandatory}[data-wptds-carousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-item]{inline-size:100%;scroll-snap-align:center;scroll-snap-stop:always}[data-wptds-car
ousel][data-default][data-variant="FullWidth"]
[data-wptds-carousel-item]:first-of-type{scroll-snap-align:start}[data-wptds-carousel][data-default][data-aria
nt="FullWidth"]
```

```
[data-wptds-carousel-item]:last-of-type{scroll-snap-align:end}[data-wptds-carousel][data-default][data-variant
="FullWidth"]
[data-wptds-carousel-item]>{*{inline-size:100%}[data-wptds-carousel][data-default][data-bleed-inline]
[data-wptds-carousel-controls]{--control-side-gap:.25rem;inline-size:calc(100%
(var(--control-side-gap)*2));transform:translateX(calc(0rem
+
var(--control-side-gap)))
translateY(-50%)}[data-wptds-carousel][data-desktop]
[data-wptds-carousel-control]:hover:not([aria-disabled="true"]):not(:active){--wptds-carousel-control-bg-color
:#fff;--wptds-carousel-control-border-color:#ddd;--wptds-carousel-control-box-shadow:0rem
.125rem
.3125rem
rgba(0,0,0,.14);--wptds-carousel-control-fg-color:#111}[data-wptds-carousel][data-desktop][data-variant="No
rmal"]:has([data-wptds-carousel-scroll-container]:hover),[data-wptds-carousel][data-desktop][data-variant="N
ormal"]:has([data-wptds-carousel-control]:hover),[data-wptds-carousel][data-desktop][data-variant="FullWidt
h"]:has([data-wptds-carousel-scroll-container]:hover),[data-wptds-carousel][data-desktop][data-variant="Full
Width"]:has([data-wptds-carousel-control]:hover){--wptds-carousel-control-opacity:1}[dir="rtl"]
[data-wptds-carousel][data-default]
[data-wptds-carousel-controls]{transform:translateX(calc(0rem
+
(var(--wptds-carousel-control-size)/2)))
translateY(-50%)}[dir="rtl"]
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="start"]>svg{transform:scaleX(-1)}[dir="rtl"]
[data-wptds-carousel][data-default]
[data-wptds-carousel-control][data-direction="end"]>svg{transform:scaleX(1)}[dir="rtl"]
[data-wptds-carousel][data-default][data-bleed-inline]
[data-wptds-carousel-controls]{transform:translateX(calc(0rem
-
var(--control-side-gap)))
translateY(-50%)}[data-wptds-carousel][data-default],.b_drk
[data-wptds-carousel][data-default]{--wptds-carousel-control-bg-color:#484644;--wptds-carousel-control-bord
er-color:#545250;--wptds-carousel-control-box-shadow:0rem
.125rem
.1875rem
rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#d2d0ce}.b_dark
[data-wptds-carousel][data-default]
[data-wptds-carousel-control]:active,.b_drk
[data-wptds-carousel][data-default]
[data-wptds-carousel-control]:active{--wptds-carousel-control-bg-color:#484644;--wptds-carousel-control-bor
der-color:#545250;--wptds-carousel-control-box-shadow:0rem
.125rem
.1875rem
rgba(0,0,0,.1);--wptds-carousel-control-fg-color:#d2d0ce}.b_dark
[data-wptds-carousel][data-desktop]
[data-wptds-carousel-control]:hover:not([aria-disabled="true"]):not(:active),.b_drk
[data-wptds-carousel][data-desktop]
[data-wptds-carousel-control]:hover:not([aria-disabled="true"]):not(:active){--wptds-carousel-control-bg-color
:#605e5c;--wptds-carousel-control-border-color:#545250;--wptds-carousel-control-box-shadow:0rem
.125rem
.3125rem
rgba(0,0,0,.14);--wptds-carousel-control-fg-color:#faf9f8}.gs_card
.iacfic
.iacfmit
.iacfimgc,.gs_card
.iacfic
.iacfmit
.cico,.b_wpt_container
.iacfic
.iacfmit
.iacfimgc,.b_wpt_container
.iacfic
.iacfmit
.cico{width:100%!important;height:100%!important;border-radius:0}.gs_card
.iacfic
.iacfmit.iacfstc
img,.gs_card
.iacfic
.iacfmit
.iacfimgc
img,.b_wpt_container
.iacfic
.iacfmit.iacfstc
img,.b_wpt_container
.iacfic
.iacfmit
.iacfimgc
img{width:100%;height:100%;object-fit:cover}Images of How To Make
photovoltaic Panels FlatComplete Solar Panel Installation Guide (2026) | Today's HomeownerFlat PV panels:
6 advantages and drawbacks -- RatedPowerFlat Roof Solar Panel Installation | SESC Solar ServiceFlat Roof
Solar Panel Installation | SESC Solar ServiceFlat Roof Solar Panels: Everything You Need To KnowFlat
```

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photovoltaic panels in a solar power plant. Green energy Stock ...what is a flat plate photovoltaic module > > Basengreen EnergyFeatures and solutions for your flat roof PV system - Sun BallastFlat Roof Solar Panels | Solar PV | Bright SparkAerial top down photo of solar panels PV modules mounted on flat roof ...How do Solar Panels made? What are they made of? | Solar ChoiceSee allSFSFlat Roof Solar Installation: Pros, Cons, and Best PracticesDiscover the pros, cons, and best practices of installing solar panels on flat roofs. Learn optimal angles, spacing guidelines, mounting solutions, and key considerations for efficiency, ...

Mounting panels completely flat is generally not advisable. A minimum tilt of 5 to 10 degrees allows rainwater to run off effectively, washing away dust, pollen, and other debris that can ...

Discover the pros, cons, and best practices of installing solar panels on flat roofs. Learn optimal angles, spacing guidelines, mounting solutions, and key considerations for efficiency, durability, and roof ...

Web: <https://www.falconengineering.co.za>

