



Here is the Q&A Report from our live webinar, **Strengthen Your Designs with the Latest Strong-Wall® Applications Webinar**, held on October 30, 2024. Thank you for submitting your questions. You can also [view this webinar's recording](#) and the [slide deck](#). Please send any additional questions to Damon Ho (dho@strongtie.com).

Question	Answer
For the non-stacked application, are PSL posts acceptable in lieu of LSL posts?	We have a minimum requirement specification for the LSL. The material we tested for is TimberStrand with a modulus of elasticity (MOE) of 1.3E. When considering using PSL posts, ensure they meet or exceed this MOE rating of 1.3E to provide comparable structural performance.
Can we substitute the wood posts for PSL members for the Two-Story stacked?	We have a minimum requirement that the material must be LSL, specifically TimberStrand® with a modulus rating of 1.3E. Any substitute material should have an equivalent modulus capacity of at least 1.3E, as this is essential for comparing alternatives such as PSL members.
Can you do more than two stories with the Strong-Walls?	The current code report limits the prefabricated walls to two stories.
Are special inspections required for these installations per the ICC listings?	ESR-2652 Section 4.3 provides guidance for special inspection depending on your project.
Are there any plans to develop a 30" width WSWH with higher capacities than the WSWH24x? I'm in a high seismic region and it would be pretty popular.	Strong-Wall products of both SSW and WSWH offer a maximum width of 24", but the product allows for increased width by adding studs on both sides of the panel. However, the panel will still only be able to use the maximum shear load as published. Another solution is to install side-to-side WSWH18x and WSWH12x panels to increase load and 30" width (please consider anchorage design solution).
Can you use two sets of back-to-back walls in tandem? i.e. two WSWH 24" back-to-back walls and then two WSWH 18" back-to-back walls for a 3'-6" total length?	You will want to consider the anchorage requirements and the load path / transfer to the walls. Also, consider the deformation compatibility between the two wall sizes. Otherwise, there are no restrictions to using the walls in tandem.



<p>Are there any options for non-registrant designers to spec out Strong-Walls on their designs? I know there was a prescriptive design guide published at one time; however, I believe that has since been discontinued. I always see in the current installations that a designer is required for the foundation.</p>	<p>We have the Strong-Wall Bracing Selector for projects designed under International Residential Code (IRC). https://www.strongtie.com/lateralsystemssoftware_softwareandwebapplications/category</p>
<p>How do building inspectors verify correct installation when completed? Looks like some hardware is concealed when installed....</p>	<p>We provide detailed drawings with specifications for inspection checkpoints to assess the installation quality of Strong-Wall products. You can refer to pages 50 to 71 for WSWH and pages 105 to 118 for SSW in catalog C-L-SW24. Inspections must be scheduled as specific project milestones are reached, including checks for foundation, framing, electrical, plumbing, mechanical systems, and more. Therefore, the Engineer of Record (EOR) needs to coordinate with building inspectors to ensure the correct installation of structural designs. For example, during the installation phase of the Strong-Wall anchor bolt installation, requirements should be carefully checked and approved for accuracy.</p>
<p>Are anchor rod strengths (in concrete foundation wall) provided in the catalog for back-to-back Strong-Walls?</p>	<p>Yes, there are anchorage solutions for concrete walls in the new catalog.</p>
<p>What is the Response Modification Coefficient R for this type of wall?</p>	<p>R = 6.5.</p>
<p>Is there a new Canadian shearwall catalog for 2024?</p>	<p>We do not have a new Canadian shearwall catalog for 2024. We are working on a new catalog for Canada. We will plan to have these applications in engineering letter format for the Canada market as an intermediate solution.</p> <p>While we complete this update, you can refer to our 2021 Strong-Wall catalog for Canada for helpful information. Reference link: https://ssttoolbox.widen.net/view/pdf/9bqw2unadn/C-L-WSWHCAN21.pdf</p>



<p>The table for WSWH24X7 shows a holdown tension at allowable shear load of as much as 37 kips. Any thoughts on the cost to design and build a foundation under one of these panels?</p>	<p>Simpson Strong-Tie offers various solutions for installing WSWH on different foundation types such as slab-on-grade, raised floors, stem walls, etc. For additional information, you can refer to the tables on pages 37 and 38 for specific foundation dimensions corresponding to the anchorage ASD allowable tension values.</p> <p>However, to accommodate the diverse characteristics of construction projects, the foundation design is the responsibility of the Engineer of Record (EOR), ensuring compatibility with the Strong-Wall panel. We hope our response is helpful.</p>
<p>Strong-Wall on top of steel beam application?</p>	<p>Yes, see WSWH-SBC or SSW-SBC in the catalog.</p>
<p>What R_o and R_d values should we consider for this system?</p>	<p>I believe the values you're referring to are the System Overstrength Factor (Ω_o) and the Deflection Amplification Factor (C_d). For the WSWH, you can refer to our code report ESR-2652, specifically Section 4.0 on Design and Installation, which specifies $\Omega_o = 3$ and $C_d = 4$. We hope this information is helpful.</p>
<p>Can post-installed anchors into the foundation wall be used with these walls, or do they require cast-in-place anchors?</p>	<p>Yes, post-installed anchors can be used. There are no restrictions against designing a post-installed epoxy or anchor bolt solution. However, the wall's design values should be adjusted to match the maximum tension and shear capacities that the post-installed anchor can achieve.</p>
<p>Do you have recommended installation details for raised floor (RF) application with floor joists perpendicular to the WSWH?</p>	<p>We recommend installing perpendicular framing to the floor system, positioned on the inside face, with solid DF/SCL blocking under the center of the Strong-Wall; joist hangers may also be used. The perpendicular floor framing should be installed at a maximum spacing of 2' on center. For parallel floor systems, install blocking within 6" of each end of the WSWH/SSW panel, ensuring the blocking depth matches the floor framing. Please refer to page 60 of catalog C-L-SW24 for more details.</p>
<p>Do you know when the catalog will be available in a hard copy?</p>	<p>The printed catalog should be available by December 2024.</p>
<p>Have you considered thickness = 5.5" for WSWH walls?</p>	<p>Yes, this has come up. We find the majority of the application is still 2x4 wall framing.</p>



<p>For two-story stacked walls, are there minimum joist depth requirements?</p>	<p>We do not have specific requirements for minimum joist depth. Rather we limit the joist depth maximum to 18" for two-story stacked applications. Designers are allowed to design the floor according to their conditions. A note about blocking the floor system under the panel will be necessary. Please refer to page 22/C-L-SW24 for more details. We hope this information is helpful.</p>
<p>2x6 stud wall framing being driven by Title 24, if WSWH 5.5" then better edge distance for concrete anchors, higher strength & stiffness.</p>	<p>As referenced on page 46 of the C-L-SW24 catalog, we allow a minimum edge distance of 3.75" for WSWH applications. However, designers may consider a larger edge distance to suit specific conditions. Please note that the governed shear load, based on panel strength, has been calculated and can be found in the table on page 49 of the C-L-SW24 catalog.</p>
<p>Would we (engineer of record) be allowed to design the WSWH anchor bolts for less than the full tension capacity listed in their embedment tables? For instance, if we calculate a lower shear value acting on the panel, can we reduce the uplift tension accordingly?</p>	<p>Yes, anchorage can be evaluated based on lower shear demand.</p>
<p>Is there a two-story application that does not require out-of-plane bracing at the elevated story -- e.g., vaulted ceiling rooms?</p>	<p>Strong-Wall is mainly developed as an in-plane shear load application and allowable out-of-plane distribution load. We understand that situations like these are inevitable given the diversity of construction site conditions. We are available to discuss based on your project's unique requirements.</p>
<p>In follow up to this question, how can WSWH panels be used in a retrofit situation, where the foundation is existing? Are 1" epoxy anchors allowed, and what uplift tension would those need to be designed for? What about the WSWH specific footing details, like hairpin bars and minimum width of footing that are likely not present in the existing foundation?</p>	<p>Currently, we are working on a post-install solution for WSWH and SSW, so stay tuned for updates on this project and we'll soon be able to provide case-by-case support if you need.</p> <p>In general, if an existing foundation does not meet the catalog requirements for hairpin reinforcements or width, the panel's load capacity may be governed, often resulting in a reduced load. Given the variety of construction characteristics, we're available to assist you with tailored support based on your project's unique requirements.</p>

<p>Any guidance or concerns regarding underpinning WSWH pad footings below existing foundations? Any effect, or considerations of tabulated allowable shear values?</p>	<p>In your case, we recommend that a professional designer check whether the additional load from the pad footing will impact the existing foundation, especially regarding stability and load-bearing capacity. The tabulated allowable shear values may vary depending on the specific conditions of your project. One suggestion we can offer is a quick load transfer analysis based on the maximum anchor tension load effect for concrete at page 12 of C-L-SW24 for WSWH and page 74 of C-L-SW24.</p>
<p>Is the Strong-Wall supposed to sit directly on the concrete foundation? I don't see the PT sill running under the 3D images.</p>	<p>The standard installation is directly on concrete. You can reach out to the Simpson engineering team to assist with consideration when Strong-Wall is on a wood sill.</p>
<p>I'm trying to imagine a scenario where the nonstacked application is necessary. Looking at your drawing, I see the posts are still very stacked & there is very little space between them. It's not like this, as drawn, opens the opportunity for a window or something. Can you give an example of where/why this would be necessary?</p>	<p>Thank you for your interesting question. It is not necessary to use the space between posts because it is very narrow. Nonstacked applications are used sometimes to field issues with the opening architecture area of the upper floors or MEP systems. One of the situations that led us to develop this option is when, at the second-floor level, the architectural design includes openings such as doorways. We hope this answer is helpful.</p>
<p>Is there a stacked application for steel beams?</p>	<p>Please contact Simpson to clarify whether the beam is in between the walls (part of floor framing), or are both walls stacked on top of the steel beam.</p>
<p>For raised floor condition, have you considered supplying a pre-fab LVL rim below the wall? Make it the width of the wall, using (2) vertical pipes with inside dia = 1.25" > the 1" rod to prevent buckling?</p>	<p>It's a valid consideration. The field installed blocking will accommodate the different floor framing depths as well as keeping the cost down.</p>

<p>For a two-story nonstacked application, can the post with holdown on the first floor rotate 90 degrees, for easier installation retrofitting in existing wall?</p>	<p>We tested it at the particular orientation that you saw. That said, we're always open to looking at alternates ideas. They would just need to be vetted.</p> <p>As long as we're getting a continuous load path, I think we can work with different ideas. But right now, we do try to stick to the installation details that we show. If you have a particular installation where you want to rotate that, that's something we can look at and we would just need to examine that load path and make sure we're able to get proper load transfer.</p> <p>These are the type of conversations that our engineering partners should be having with our branch engineers to discuss the particular applications that they're facing. We can always work with different applications, it's a matter of finding the right product and the right way to do it.</p>
<p>What is the max distance for offsetting stacked Strong-Walls?</p>	<p>The offset distance will depend on the panel size, installation requirements, and anchor spacing from the upper panel, as outlined in our catalog (see p.33 in C-L-SW24). For the WSWH18, the available room is 13.25", and for WSWH24 is 15.25" in stagger stacked installation.</p>
<p>Are there predrilled chases for plumbing and electrical provided?</p>	<p>There are channels precut into the WSWH for electrical. There is also a guide for allowable hole size and location for WSWH panels.</p>
<p>Can the two-story nonstacked application be used with two Strong-Walls on the lower level instead of using a post?</p>	<p>Absolutely. The anchorage condition would be essentially a mirror image of the stack or the staggered condition that we show.</p>
<p>Can you discuss the shear transfer clip at the base of the wall and how shear is transferred to the wood beam below? It appears that there are only 6 fasteners from the clip to the wood shear wall above?</p>	<p>As we understand your question, the clip and the (6) SWS fasteners you mentioned are part of WSWH-BP, and the WSWH product has already been preattached with WSWH-BP. The hardware kit of this application only includes WSWH WBBP bearing plates with (4) SDS 1/4" x 3 1/2" screws on both sides; please refer to page 24 of C-L-SW24. In terms of load, the lateral load transfer mechanism begins with forces moving from the panel to the anchorage. From here, the load continues through a WSWH WBBP plate beneath the panel, which helps to distribute the compression and bearing load. The wood beam then provides resistance, allowing the load to transfer down through the rod to the steel bearing plate beneath the wood beam, finally dispersing across the beam.</p>



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Webinar Q&A

Why do the screws into the wood beam increase the capacity of the wall on wood beam condition?	SDCF Timber-CF screw help increase the wall's rated capacity by enhancing the compression strength of the wood beam. Our testing and modeling have shown that these screws act similarly to piers or piles for a heavy building in soil that is low capacity. By distributing the compression load into the wood member, the screws prevent concentrated stress points that could lead to failure. This added reinforcement enables the wood beam to handle higher loads, which improves drift performance and supports greater overall wall capacity.
Can you have adaptable kits that will allow you to have the bolts outside of the body of the wall panel?	We have assisted customers facing similar situations with a custom-made adaptable kit. The WSWH and SSW conversion kit uses fillet welding to join two plates with converted tapped holes. Please feel free to reach out if you need further assistance.
How is the correct installation verified here?	Please reach out to Simpson for clarification with installation verification.
Is there any limitation to the number of stories for using the WSWH?	Currently, we limit stacked applications to two floors. For buildings with three or more floors, the overturning moment places significant demands on the first-floor base connection, making it challenging to provide feasible solutions for first-story panels.
For the post under the Strong-Wall, is a Doug fir post acceptable?	We have a minimum requirement specifying that the material must be LSL, specifically TimberStrand® with a modulus grade of 1.3E. Any material we consider as a substitute should have an equivalent modulus capacity of at least 1.3E. This is a key comparison when assessing alternatives like Douglas fir.
Would it make the most sense to check the steel beam (under the Strong-Wall) with an applied moment from the Strong-Wall? Or with the tension/compression couple?	The steel beam must be designed and detailed according to code by the designer to withstand the forces imposed by the Strong-Wall panel above, including superimposed vertical load, point load (tension/compression), shear load, and overturning moment.

<p>The testing appears to use a very short beam section for both the wood and steel beams. It seems like the deflection of a beam spanning across a room would increase the drift significantly. Do you have any guidance for engineers to ensure that added drift is accounted for?</p>	<p>Yes, that’s an excellent point. Our testing setup uses a shorter beam to simplify laboratory conditions, which may differ from field applications where beams span larger distances. This increased span could indeed lead to additional deflection and greater drift.</p> <p>To account for this, we recommend that the Engineer of Record (EOR) evaluate the specific conditions of their project, including beam length and stiffness. For situations where added deflection might impact wall performance, engineers can collaborate with us to determine appropriate adjustments. By considering the lateral loads and beam size in your design, you can incorporate any additional drift from the beam into the overall drift limitations of the wall. We’re available to provide further guidance based on your project’s unique parameters.</p>
<p>What if the applied axial load is bigger than that shown in the catalog? For example, 10 kips?</p>	<p>Currently, our catalog does not provide a solution for applied axial loads as high as 10 kips. A higher axial load can help counteract the tension force on the anchor; however, the simultaneous effect of both lateral and axial loads (combination loading) must be considered at such high levels. Generally, the shear load will be decreased when a higher axial load is applied. We can review this on a case-by-case basis for you.</p>
<p>Where can I get the testing shear value?</p>	<p>The SST Strong-Wall does not provide a standalone test value. Instead, the final shear value is determined by governing factors from other required limit calculations, including foundation (concrete) bearing, top-of-wall connection, and wood/steel panel strength in accordance to the Acceptance Criteria for pre-fabricated walls. You can find the final shear value in the catalog.</p>
<p>Is there a stacked application for steel beams if the steel beam is part of the framing (between the walls)?</p>	<p>Currently, we do not have a solution for stacked applications with steel beams in between, but we will consider it for future development. In stacked applications, the load capacity will generally be lower than standalone installation, as the transferred force diminishes through the bolt connection. We recommend welding the SBC to the steel beam project to leverage fixity, which can help achieve a higher load capacity for this type of application.</p>
<p>Are the anchors post-installed in grout, or set in their proper location before concrete is poured?</p>	<p>SST Strong-Wall provides solutions for cast-in-place anchorage to achieve maximum shear capacity, using a WSWH/SSW anchor bolt template to ensure proper positioning, required anchor length, and spacing for specific panel widths. Designers also have the option to use post-installed anchorage tailored to their specific conditions.</p>



<p>Did you test with zero axial load?</p>	<p>Yes, the test criteria allow for the development of shear forces with or without superimposed axial (or vertical) compression loads, such as gravity loads. We conduct the test using only cyclic lateral loads and analyze the effects of independent vertical forces through additional engineering analysis methods.</p>
<p>What is the allowable out-of-plane load on a wood Strong-Wall? Can they replace the required king studs if space is limited?</p>	<p>Please refer to the Out-of-Plane table on page 76 of catalog C-L-SW24. Strong-Wall products are not really designed with out-of-plane loads in mind but rather for in-plane shear loads. The maximum out-of-plane load capacity we offer is 310 psf for the WSWH18x8 and 200 psf for the narrower WSWH12x8. To achieve a higher out-of-plane load capacity, we recommend attaching a stud or king stud to the panel. Substitutions may be allowed if the designer can ensure and approve the shear transfer for adjacent wood members.</p>
<p>Have the load capacities for a standard installation changed from the 2021 version?</p>	<p>The load capacities for standard panels and other applications remain unchanged in the new catalog, C-L-SW24, in accordance with the latest building and testing codes.</p>
<p>Is it necessary to rotate the holdown 90 deg. so we can install the SDS screws from the sides because we cannot access from the back of the existing wall.</p>	<p>We tested it at the particular orientation that you saw. That said, we're always open to looking at alternates ideas. They would just need to be vetted.</p> <p>As long as we're getting a continuous load path, I think we can work with different ideas. But right now, we do try to stick to the installation details that we show. If you have a particular installation where you want to rotate that, that's something we can look at and we would just need to examine that load path and make sure we're able to get proper load transfer.</p> <p>These are the type of conversations that our engineering partners should be having with our branch engineers to discuss the particular applications that they're facing. We can always work with different applications, it's a matter of finding the right product and the right way to do it.</p>
<p>Will the new software work on Macs?</p>	<p>Our Strong-Wall software is developed on the Simpson Strong-Tie website, so all operating systems including Mac OS are compatible.</p>
<p>Have the installation details on your website been updated?</p>	<p>Yes, you can find all the updated documents on our website. We also provide a QR code link in the slide to lead to the website documents.</p>

<p>Why is the welding limited to certain lengths for the SBC? I would assume that you would get a better behavior from the SBC not prying from the steel beam flange if you welded along the entire length of the SBC? As the designer, would it be possible to weld beyond the requested length?</p>	<p>We developed this based on calculating the minimum size strength requirements based on AISC 360-22 and experimental observations. The overturning failure of tensile and compression modes will be focused at the anchor SBC hole location, so we only need to provide welds at that location, which is enough reinforcement (no strain SBC observed) for the panel above to perform with maximum force behavior. Although testing a 10% decrease from the rigid base, this is acceptable. For designers, it is allowed to provide longer weld or full weld, but please note that will be redundant and not add to the shear load.</p>
<p>As the EOR, do we need to provide all the installation details, or can we simply call out the wall model and Simpson would send the details when the contractor orders the walls?</p>	<p>All installation details can be found on our strongtie.com website here: https://www.strongtie.com/search?v=%3Adrawing-name-asc%3AdrawingProductLine%3AStrong-Wall%C2%AE+Shearwalls%3AdrawingDimension%3ADetail+Sheets&tab=drawing&keywordFilter=wswh It is our suggestion that you include the installation detail sheet collated in with the design drawing set, however it is not uncommon to simply reference the weblink to the contractor/framer during construction and they can refer to the details outside of your engineered set. In either occurrence, it is strongly recommended that all who will have a part in installing the Strong-Wall be very familiar with the installation details and have a copy of each relevant set for their use.</p>
<p>Where can you find the reductions for raised-floor joist depths greater than 16"?</p>	<p>We don't provide tabulated reduction factor(s) for raised floors using joist depth greater than 16". The reduction factor is affected by the slenderness ratio of the anchor in the floor system. If a designer wants to use this option, this is allowed to design and make sure the reduction factor is decreased by the effect of increased anchor bolt effective length (buckling limit). We could also provide case-by-case support for your condition.</p>
<p>Do you have any tables which address stiffer deflection criteria? Specifically in the H/400 range for wind.</p>	<p>Can you give us more information about the application you are targeting? The wind load capacity can be reduced linearly with corresponding drift values for corresponding stiffer deflection criteria.</p>
<p>For the raised foundation type, how close to a channel or corner can the Strong-Wall be placed?</p>	<p>We do not limit the minimum distance for corner installation of a Strong-Wall shearwall on a raised floor or wood floor system. The panel could be placed on the end.</p>
<p>Does the steel beam supporting a shearwall need to include any other loads besides the axial or point load anticipated?</p>	<p>The steel beam shall be designed and detailed per code by the designer to resist the forces imposed by the Strong-Wall panel above including the following: Superimposed vertical load, point load (tension/compression), shear load and overturning moment.</p>

<p>For what types of projects are Strong-Walls more cost effective than a typically designed wooden shear wall? The abundance of hysteresis curves in the presentation makes me think higher seismic. For context, I live in Chicago which is SDC A and ultimate wind speed is 107 mph.</p>	<p>Strong-Wall® shearwalls are suitable for residential, multifamily, and light-frame commercial construction in areas with high-wind and seismic activity, providing the most benefit in high seismic zones (SDC C-F). Additionally, they're ideal for buildings with large openings that require narrow bracing methods and high shear load resistance. For lower force and architecture requirements, you can use site-built shearwalls and the prescriptive bracing methods.</p>
<p>Will there be a European version of your software available with forces and resistances given in kN and lengths in meters, etc.?</p>	<p>We are providing products in two main markets: North America (imperial) and Canada (metric). For the software, all current Strong-Wall software is in imperial. In the future, we may consider an update allowing users to convert to metric values.</p>
<p>Can the WSWH be installed on an RWF w/ 2x6 or 2x8 FJs? I saw that there was a range of 12"-16" FJs</p>	<p>We allow floor joists lower than 12". Please refer to footnote 6 on page 19 of C-L-SW24, where we limit the maximum height to 12" for the load table. For 16", you need to multiply by 0.92 for allowable shear load.</p>
<p>How do the threaded rods connect to the SBC plate?</p>	<p>The SBC plate includes (2) tapped holes. The threaded rods are pre-installed flush to the bottom of the SBC plate. Reference page 28 of the catalog, C-L-SW24.</p>
<p>For the top steel beam condition, are the allowable loads still based on R = 6.5? If moment frame below, then R less (3.5 ordinary). Typically for mixed system, I'd use lower R for demands.</p>	<p>Where Strong-Wall panels are installed in structures with a flexible system between R = 6.5 and R = 3.5, we recommend using the lower R-value = 3.5 for the entire demand calculation so you're conservatively accounting for potential weaknesses in the more flexible system. This is in line with common design practices in mixed systems, where the seismic response could be limited by the less ductile portion of the structure. Please refer to ASCE-7 section C12.3 to navigate your model analysis with the worst case of the two.</p>
<p>What is the approximate cost of a Strong-Wall shearwall —a 24" long x 9' high model, for example?</p>	<p>Cost will vary based on source, quantity, and model or component. We would recommend visiting your local lumber yard or building supply distributor for accurate pricing.</p>
<p>Do your Strong-Wall on beam designs have any guidance for limits to gravity loading on the beam? Or is it entirely up to the designer to apply the Strong-Wall overturning forces to the supporting beam?</p>	<p>We currently limit the maximum superimposed vertical load (such as gravity loads) to 7.5 kips for the Strong Wall (refer to page 29 of C-L-SW24). Please note that panel strength will probably be limited with higher axial loads, but we can and have evaluated case by case in combination with shear loads. The designer needs to evaluate all the gravity loading on the supporting beam.</p>

<p>For panels on wood beams, what grade is required for the wood beam (DF-L ok or does it have to be SCL)?</p>	<p>The WSWH wood beam solution may be installed on DFL #2, LSL, 2.0E LVL, or CLT. Please refer to page 23 of C-L-SW24 for more details.</p>
<p>Two-story nonstacked: What is the shear transfer mechanism between the lower wall and the floor above?</p>	<p>The lateral load transfer mechanism begins with forces moving from the upper panel to the anchorage, where anchor rods span the floor system to connect the upper and lower panels. From here, the load continues through a WSWH shear-transfer plate and nut, positioned over the anchor rods and beneath the upper panel, which helps to distribute the force. The floor system then provides resistance, allowing the load to transfer down through the MSK holdown, finally dispersing across the lower floor plate.</p>
<p>What is the difference in the performance of a shearwall and a cantilevered flagpole column?</p>	<p>In terms of the mechanism, the calculation is quite similar in the cantilever diagram. In terms of performance, it depends on the design but a Strong-Wall shearwall is designed to resist in-plane cyclic lateral loading and dissipate energy. It is optimized between three characteristics: stiffness, flexibility, and ductility.</p>
<p>I was looking for information regarding the application of Strong-Walls in a stacked two-story home application. If there is any information you can send, I would greatly appreciate it. I'm looking for information regarding the new offset rules for the Simpson Strong-Wall.</p>	<p>We provide the below information about Strong-Wall with straight-stacked installation and offset lower rules as nonstacked installation:</p> <ul style="list-style-type: none"> - You can find the straight stacked (two-story stacked application) on page 21 of C-L-SW24 - You can find the nonstacked application on page 32 of C-L-SW24. Please note that the offset distance will depend on the panel size and installation requirements.
<p>If you place a Strong-Wall wall on a wood or steel beam, there has to be some minimum amount of stiffness in the beam to cover the deflection limits. Are those beam stiffness values provided?</p>	<p>For the WSWH on a wood beam, we have published the engineering solutions for additional displacement from the beam; please refer page 26 of C-L-SW24. For the stiffness requirement, the WSWH may be installed on DFL #2, LSL, 2.0E LVL, or CLT. Please refer to page 23 of C-L-SW24 for more details. For the Strong-Wall on a steel beam, we do not currently provide the exact stiffness or stiffener requirement that needs to be provided for the steel beam, other than a steel beam with flange of 0.4". This will basically be up to the designer to design based on their conditions. If you're getting greater deflection, those things do need to be accounted for, and that's an instance where we would want to get some of the variables of your structure so we can work together to help you with those values.</p>



<p>What is the maximum width of the wall? If the max. width is 24", can greater widths be engineered and fabricated for custom installations?</p>	<p>Both the Strong-Wall SSW and the WSWH offer a maximum width of 24". The product allows for increased width by adding studs on both sides of the panel. However, the panel will still only be able to use the maximum shear load as published. Another solution is to install side-to-side panels to increase load and width (please consider anchorage design solution).</p>
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