Meeting Braced-Wall Requirements: A New Portal Frame Solution
Webinar Q&A

This document includes questions submitted by attendees during the live webinar, *Meeting Braced-Wall Requirements: A New Portal Frame Solution* held on April 17, 2019, along with presenter responses. In some cases, duplicate questions have been combined and noted as such. Please send any additional technical questions to AskSimpson@strongtie.com.

	Question	Answer
	General Wall Bracing	
1	In the Wall Bracing section, RCWB can be used to fulfill same code bracing requirements as a 1x4 LIB, also noted "not to replace structural shearwall load -carrying component. Explain difference.	Wall bracings is a lateral resisting system prescribed in the IRC and 1x4 let-in bracing (or approved metal straps) is one wall-bracing method. Alternatively, in the IBC, the Designer must follow the IBC and code-referenced standards (like ASCE 7-16 and the AWC's Special Design Provisions for Wind & Seismic) to determine the actual forces on a structure and design the lateral-force-resisting system (one option is shearwalls) to resist these calculated loads.
2	I am new to these methods will you please some brief descriptions of the following systems ABW,PFH,PFG,CS-PF,CS-G	You can find an explanation of these methods in our free online course: Wall Bracing for Wind Design with 2015 IRC
3	2015 IRC requires 3/8" not 7/16" WSP for Portal Frame With Holddowns Fig. R602.10.6.2	Agreed - we showed 3/8" for the PFH in slide 19 of the presentation.
4	On the previous slide, it mentioned the "contributing length". What does that mean?	This is the length of bracing the method provides. Depending on the strength of the bracing method, a braced wall panel may contribute more, or less, than its actual measured length towards meeting the required length of bracing. See IRC Table R602.10.5.
5	Is there a minimum width for the second piece of sheathing when the wall height is over a single sheet of plywood?	The material should match the width below.
6	Since this is prescriptive, is there something specific required if I have (2) 18'-0" garage doors adjacent to one another with 12" between? Or is there some verbiage that prohibits this?	Braced wall panel spacing should meet the requirements of R602.10.1.1.

7	Can 2"x 6" stud walls and 5/8" plywood sheathing allow for less wall bracing?	No, deeper studs have no effect on the wall bracing amount, and the prescriptive IRC does not account for increased shear capacity for thicker wood structural sheathing (see Section R604 and Table R602.10.4). For adjustment factors for wall bracing length required see Table R602.10.3(2) for wind and Table R60210.3 (4) for seismic.

Framing

8	Did you say this apply online to garage openings?	Yes, this works for garage openings for wall heights up to 10'. And you would have to use that in the drop-down menu. If you have a taller wall height, you can build a pony wall on top for up to 12' walls.
9	Does Simpson allow knee braces to be installed into the face of a solid Simpson Strong wall? Specifically we have a roof cantilever over a Simpson wall and the contractor is claiming we can attach a knee brace to a Simpson Strong Wall at mid wall height in order to carry the cantilever roof.	The portal frame system (PFS) system has not been evaluated for the point loading of knee braces.
10	How do you ensure that Lateral Torsional Buckling is addressed if you have a wall thickness of only 3" thickness?	We have evaluated combined lateral and axial with calculations.
11	How are you dealing with wind perpendicular?	We have evaluated perpendicular wind loading through combined out-of-plane and axial calculations.
12	Are the hold down made only for wood post rather LVL?	Both. Framing members for the PFS can be either sawn lumber or LVL.
13	Can this system be used in a porch installation where there isn't concrete to anchor into, but a deck frame below to anchor into? ***(Similar)*** It appears as though this system needs to be attached directly to a concrete foundation. Is there anything available where the frame would be applied above the first floor framing? ***(Similar)*** Is there a solution for a wood framed floor?	For now, our anchorage is designed around retrofitting with either SET-3G or AT-XP adhesives into pre-poured concrete, so we do not have anything currently developed for that.

	(Similar) IS THE PFS SYSTEM APPLICABLE IN A RAISED FOUNDATION SITUATION?	
14	Can the post base stand off be installed upside down? Because it will be...	I suppose it could, but you'd have to work real hard at that. We have "This Side Up" stamped on it, for what that's worth.
15	What about connection of "drag strut" to portal frame?	Loads dragged into the PFS should be designed and detailed similarly to current methods used with the IRC PFH.
16	Can we use only one holdown at each end?	No, both holdowns and the standoff base need to be installed under each column. A single ABW44Z post base is supplied for the post in the kit for the single wall configuration.
17	Can we applicate this solution for a cold formed structure?	No. The PFS has not been evaluated for CFS use.
18	Does this work with a butterfly roof system?	Roof design and how it interacts with braced wall panels is up to the designer to determine. Load path and beam support must be considered to design the beam properly.
19	When approaching the corner of the garage: will it matter which direction you are wrapping your top plates? (IE PFS forward vs having to frame the side wall of your garage to flush with the face of the PFS)	The orientation of the top plate lapping and the position of the PFS should be consistent with the framing of the IRC PFH. Designers should be considerate of the wind loading perpendicular to the wall line and provide adequate structural detailing. By framing the wall line forward, the return wall will brace against perpendicular loading.
20	This is great for lateral loads, but does it work for wind perdicular to wall when you have a narrow wall like that? Or is it assumed there will be additional dimension lumber around that portal frame for that purpose specifically?	The PFS does provide resistance to perpendicular wind resistance. Loading should be evaluated similar to the IRC PFH, and supplemental framing should be added if deflections exceed the allowable.
21	What if spacing between PFS is more than 20'	The PFS is limited to a maximum 18ft opening.
22	Do the LVLs require the 1/4" shim?	The shims are only required when there is a LVL beam over sawn lumber columns. A LVL column and beam configuration would not require shims
23	What is your advice on separation of straps from concrete for durability?	The straps of the holdowns are made from galvanized (G90) steel and are intended to make contact with the concrete.

24	Is there a 2x6 wall option as well? Need 3 ply headers for larger openings in higher snow areas. ***(Similar)*** Will this be made available for a nominal 2x6 wall? ***(Similar)*** Can you use this with a wider header if the load requires it? ***(Similar)*** Can this be used with high vert. loads where 6x header used? ***(Similar)*** What if the beam is thicker than the strongwall sysem? ***(Similar)*** Do portal frames come in wider widths to accommodate 2x6 exterior wall framing?	The portal frame system is designed for use in 2x4 framing. Designs that require 2x6 framing due to loading should consider specifying one of our prefabricated SSW or WSW Strong-Walls. For more information visit Steel Strong-Wall (SSW) or Strong-Wall Wood Shearwall (WSW).
25	What is the max height to bottom of beam of the portal frame?	This will depend on the depth of the beam. Our minimum requirements are 11 7/8 for a LVL beam or 11 1/4 (2x12) for sawn lumber. These minimums result in the maximum height of nine feet in the opening. Please note that if a deeper beam was required for bending or deflection (independent of the PFS design) then the max height in the opening would be a little less
26	Can you have a PFS in mid span of a two car garage. Total of three PFS walls	Yes, but designers will need to be considerate of the wind loading perpendicular to the wall line and provide adequate structural bracing and detailing.
27	The wall double plate is assumed to be directly on the header?	Yes, if there was no pony wall required to match the height of the adjacent framing.
28	In your graphic you show a post at the right-hand side. Is that an allowable solution?	Yes, the single wall PFS will have a column on one side and a post on the other. Could be on the left or right side. This is consistent with the requirements of the current PFH bracing method.
29	Would you be able to install a wall fixture box cut into the vertical members? ***(Similar)*** Can you drill through the panels to install back box for lighting fixture?	We allow for drilling a 7/8" diameter hole along the vertical centerline of the column. From 3" down from the top to 14" up from the bottom. This is shown in the installation instructions and structural detail PFS1 on our website (strongtie.com/pfs). A 'pancake' (flat) electrical box, the same thickness as the siding could be cut into the siding for this application.

	(Similar) Can we add cutouts for electrical/lighting in the piers? ***(Similar)*** Can you drill or cut into the vertical panels to install a back box for lighting fixtures	
30	Are any holes or notches allowed? ***(Similar)*** Are penetrations allowed through the width or length of the wall segment? ***(Similar)*** ARE PENETRATIONS ALLOWED IN THE COLUMN COMPONENT? ***(Similar)*** Can you drill a hole in the column for electrical? Max size? ***(Similar)*** Do the instructions include if holes can be drilled? If so, does it include location and size?	Yes, we have an allowable hole zone. We allow for drilling a 7/8" diameter hole along the vertical centerline of the column. From 3" down from the top to 14" up from the bottom. This is shown in the installation instructions and structural detail PFS1 on our website (strongtie.com/pfs).
31	Can you use this system for multiple openings in series?	Yes, you can use this system for that. You just need to design the header to go over those openings and we would not suggest going past 18ft.

Anchorage

32	Are the anchor bolts in the pour or post-installed?	Post-installed using AT-XP or SET-3G adhesive anchors.
33	What's the minimum foundation thickness for this concentric hold down?	We will show an example in this webinar but look at the PFS flier or the detail sheets that you can find at strongtie.com/pfs for more information.
34	Is there any reason that you couldn't use a cast in place all-thread? That would eliminate the need for a deputy inspector. ***(Similar)*** Can I use this with embedded A.B.s?	Cast-in-place anchor solutions are currently being developed.

	(Similar) IS THIS OPTIONAL TO CAST IN ANCHORS?	
35	Can the anchor bolts be installed during the initial pour?	No. Retrofit the anchors with either SET-3G or AT-XP adhesive after the concrete has cured.
36	Am I understanding correctly that the use of these products is best anchored post concrete foundation pour. (ie. not cast in place, rather anchor embedment?)	Yes. Retrofit the anchors with either SET-3G or AT-XP adhesive.
37	I assume a CMU foundation wall versus concrete will not work for any of these? ***(Similar)*** Are there install and anchorage specs for CMU foundation walls? ***(Similar)*** What is the anchorage for a CMU footing? ***(Similar)*** Can anchorage be into filled block or solid brick?	They could work but we have not developed the solutions for this yet. It will probably have to be a cast-in-place solution. CMU anchorage solutions are currently being developed. This is in the works for 2019.
38	What would be the footing size requirement for the portal frame wall system?	The footing size will vary depending on the application. Our flier, software and detail sheet will provide additional information. This will also be discussed more in the presentation.
39	Can you use SET-XP epoxy?	Yes, SET-XP is an approved alternative.
40	Some of the anchorages appear to be deep., but with short edge distances. Does the edge distance not affect the pullout capacity?	The edge distance does affect the pullout capacity but our testing and FEA modeling account for these in each application.
41	How are you able to have such a small edge distance with the adhesive anchor?	This isn't any smaller edge distance than what we would typically see for anchoring down our holdowns in shearwalls or any other type of light-frame construction. 1 3/4 edge distance is fairly common for 2x4 construction. We have evaluated the adhesive solutions to make sure they exceed the demand that is needed.
42	Using the poured in place with the anchors for a garage opening - instructions on how to align both sides when	The anchorage solutions are for installing after the concrete is poured.

	poured. The tight tolerances would need for the units to be aligned.	
43	Have you looked at this with the slab on grade post tension systems?	The slab on grade details would apply but as with retrofitting any kind of anchor into a post tension slab you would need to take great care to not sever the tendons.
44	How does curb depth effect the anchorage requirements on the PFS flier?	The details on pages five through seven of the flier define the requirements for the foundation. If you are within these specs then the embedments, and corresponding loads will apply. Please note that you can also find foundation details on the PFS landing page on our website (strongtie.com/pfs). Look for PFS2 structural details
45	Is there an alternative for modular construction. when you fasten the portal frames into the floor perineters	We'd need to understand what is meant by "floor perimeters" before being able to answer. For now, our anchorage is designed around retrofitting with either SET-3G or AT-XP adhesives into pre-poured concrete. If the floor perimeters are some kind of wood, or other arrangement, the answer would be that we don't have anything currently developed for that.
46	This seems to be a prescriptive solution. Are you supplying the reaction loads so that a foundation can be adequately designed?	We will provide anchorage solutions. These can be found in our flier, structural details and wall bracing software.
47	What diam are the Holdown Anchors?	5/8 inch diameter.

Design

48	Do you have design for column on wood-framed floor?	At this point we only have anchorage solutions for retrofitting all thread rod with either SET-3G or AT-XP into concrete.
49	Can you substitute PSL for LVL?	At this time no, it has been evaluated for sawn lumber and LVL. However we know PSL or glulam beams could be used. This is on our list to evaluate.
50	Are the beams meant to be non load bearing? Or can there be uniform load or point load on the beams or post?	Beams can be loaded with either a uniform load or point loading. The beam design is per the designer and mustmeet our minimum depth requirements. The table on page four of our flier lists maximum allowable end reactions for the beams.

51	The question about LTB is me thinking that a 3" wide compression edge (either side depending on wind direction) would tend to buckle out of plane. Evidently in the video that didn't seem to be a problem.	Correct. The system testing demonstrated no tendencies for torsional buckling of the column under load. Additionally, the system performance had been evaluated for combined lateral and axial loading.
52	Is this a valid solution for SDC D? ***(Similar)*** No SDC D application? ***(Similar)*** Are any of the portal frame systems valid in SDC 'D'? ***(Similar)*** What is the highest SDC it's approved for? ***(Similar)*** I notice that lateral loading cases presented are for wind. Does testing show similar load capacities under seismic loads? ***(Similar)*** Hi, so these Strong Walls will be okay for my seismic area of D-2? How about the foundation? Need designed?	The PFS is applicable for use in Wind and SDC A, B, and C for detached one- and two-family dwellings. Currently, we have not evaluated the PFS solution for high seismic. Designs in SDC D0-D2 should consider using one of our prefabricated Steel Strong-Wall (SSW) or Strong-Wall Wood Shearwall (WSW).
53	Will the PFS be available for seismic design category D/E in the future? ***(Similar)*** Comment: Please DO evaluate for Seismic D ASAP (IRC Prescriptive) for those of us who must design to that daily!	We are working to define the prescriptive performance requirements for the PFS in SDC D0-D2. Our goal is to have the system evaluations and equivalent lengths for those SDC's by the end of 2019.
54	What's the shear capacity for the sawn and lvl frame options? ***(Similar)*** Do you have published load values for use in an engineered design? ***(Similar)*** Does the Concurrent Vertical Load on Column include the Beam Reaction? Or is the Column Load in addition to the beam reaction?	The PFS is designed for the prescriptive market. We will not be publishing allowable shear loads at this time; just equivalent braced wall lengths.

	(Similar) Are there published lateral capacities for these portal frames? ***(Similar)*** Will the shear capacity of each portal frame configuration be provided on the simpson strong-tie website? ***(Similar)*** Do you have listed "actual allowed loads" for the portal frame rather than "equivalent braced wall" lengths ***(Similar)*** Is there any design magnitude for the shear capacity of the portal frame? ***(Similar)*** What are the actual lateral load capacities for these frames? ***(Similar)*** Are there actual lateral load capacities for each set of dimensions, or is it a purely prescriptive system? ***(Similar)*** Are there any load tables for the PFS system or is the only way to pick the system through the online sizer	
55	Does this product have ICC compliance? ***(Similar)*** Are there standards listed for your new Portal Frame Systems ***(Similar)*** Is this system already an acceptable prescriptive solution?	Currently, an acceptance/evaluation criteria for analyzing narrow site-built alternatives to prescriptive braced wall panels is not available.
56	Do you plan on trying to get a code report for IBC applications of this wood portal frame? It would be quite an interesting introduced lateral force system	No. We will be pursuing a code report for IRC bracing applications. Our current WSW and SSW Strong-Wall code reports, ICC-ES ESR-2652 and ICC-ES ESR-1679 respectively, are recognized for use in IBC engineered designs.
57	When will 2018 IRC be added? ***(Similar)*** Is this based on the 2015 IRC or 2018?	The PFS is evaluated for use under the 2018 IRC.

58	Can the Portal Frame System be used in a non-residential or commercial building? ***(Similar)*** What about the applicability for the IBC and commercial use	The PFS is designed to meet the wall-bracing requirements of the International Residential Code (IRC) Chapter 6 and the Conventional Light-Frame Construction Section 2308 of the International Building Code (IBC).
59	What element(s) were found to be yielding at the holdowns?	Deformations of the 3/8in plate washer at the holdown were the main contributor to system defections.
60	What are the deflections for these frames?	Drift performance for the PFS is evaluated at H/180.
61	E- value, 1.8 vs 2. ? lvl	For LVL with E < 2.0 E it is acceptable to use wall bracing lengths tabulated for DF/SP.
62	Does the beam need to be designed for the end moments in addition to the gravity loads in the applicable load combinations?	In typical load cases, gravity loading will control, and the beam may be designed as simply supported.
63	Can the 4-1/2 inches of framing material that needs to be added to the pony wall assembly be added to the contributing length for the wall line?	No. Increased width due to framing necessary for pony wall applications should not be added to contributing length.
64	Which parts of the PFS requires Professional designer to design, I believe I have reviewed plans that includes these system, and I remember at least some notes like the pony wall needs to separately be designed for shear is there any other parts that requires design to be part of the system?	Pony wall framing above the system will need to be specified by a designer as well as the full height studs necessary for bracing out-of-plane loading. Designers are also responsible for determining the beam loading and design.
65	You do not address out-of-plane wind at pony walls (segmented)	See the PFS1 structural details at strongtie.com/pfs. There are provisions for out of plane loading shown there. Pony wall detailing will need to be specified by the designer and will be similar to specifications made for the IRC PFH.
66	Please illustrate the pony wall on top of a braced wall	See the PFS1 structural details on our website at strongtie.com/pfs. They include pony wall details.
67	Can the strap ties at the moment connection designed/customized by a registered engineer?	No. We do not have a design procedure for the replacement of system components. Systems must use parts supplied within kits to meet published equivalent wall bracing lengths.

68	Are there any solutions for prefab portal systems on elevated timber pile foundations? Coastal applications in flood prone areas? ***(Similar)*** Are all the available PFS designed/tested even for coastal structures like elevated houses or are there any other systems for elevated structures?	The PFS system has not been evaluated for use in elevated structures. This was recently requested and we have added it to our list of applications to evaluate. The current PFS offering requires a concrete foundation. For information on installing our prefabricated shearwalls on wood beams visit; https://www.strongtie.com/search?v=Strong-Wall+Wood+Shearwalls%3Arelevance&tab=literature
69	Is Simpson taking responsibility for foundation design to resist design lateral and uplift forces from base anchorage?	Please see the PFS2 structural details on our website (strongtie.com/pfs) for our foundation requirements associated with the anchorage of the PFS.
70	Do the values on the table account for the horizontal/lateral load?	Yes. PFS performance evaluations take into consideration combined lateral and axial loading.
71	Can you use a triple thick build-up for the PFS? Since the front member is more for moment, and not directly bearing on anything, it doesn't seem like I can include it for vertical loading. A triple thick would allow for a double load bearing header.	The beam member is stitched together and the load is shared. The beam should be designed as a 2-ply for bending, shear, and deflection. The calculated reaction/shear will need to be less than the tabulated allowable reaction in the flier. These values were established from beam tests with a single ply reinforced with the MCS straps. The bearing will need to be evaluated for a single ply at the beam/column or a 2-ply at the post.
72	So the joint between LVL and the columns only a partial moment connection? does the LVL header need to be fully braced ?	The beam to column interaction is considered a partial moment connection. Bracing of the header will be dependent on loading and design.
73	Are the concentric holdowns being brought back for other applications, or are they just part of these kits?	The concentric style holdown has been resurrected for this system only.
74	What is the load path for base shear into the concrete?	The shear load path is; column to holdown, holdown to anchor bolt, anchor bolt to concrete.
75	Can we have a two-story portal frame system?	There are no plans to develop a two-story solution for the PFS systems. For two-story stacked applications take a look at our WSW and SSW prefabricated strong-walls.
76	Is this only for walls with minimal gravity loads?	There can be loads on the beam. Their design is independent of the PFS with the caveat that they meet our minimum depth requirements. The table on page four of our flier lists maximum allowable end reactions for the beams.

77	Brian, what are the lateral load capacities for given end reactions?	We have end reactions to help the designer design the beam to make sure not exceeding, and if you are you can add trimmer studs beneath the header to support that. As far as the lateral load capacity, you can look at your end reaction and any vertical loads that are right on top of your wall and not coming from your beams possibly from the floor above. Then you can look at the second column of the load table on our flier that gives you 1000 up to 7500lbs of vertical load and you could see if that reduces the equivalent wall bracing length. This is a good reason why you should use the software to get the little details to get the most wall bracing capacity out the portal frame.
78	Do you design to top 2x beam as fixed end or simply supported or somewhere in between?	When designing the beam consider it simply supported. Much like would be done for the current PFH bracing method.
79	In testing, how did the performance of the system change with a heavily loaded beam vs a lightly loaded beam?	System testing of the PFS was conducted in accordance with ASTM2126. This testing does not require gravity loading. Additional subassembly testing of the PFS beam connection evaluating gravity loading was also conducted. The PFS was then evaluated for combined gravity and lateral loading by calculation. The anticipated response due to loading will be similar to the IRC PFH.
80	Is there no significant reduction in stiffness using dimension lumber, esp. more green wood?	We have equivalent wall bracing lengths for LVL, Douglas Fir/Southern Pine and Spruce-Pine-Fir/Hem Fir have been evaluated for dry service conditions. Results can be found on page 4 of our flier. Engineered lumber does tend to be stiffer, but we have capped our allowable wall bracing replacement at 4 ft. So while the results in some cases may be the same for solid sawn and LVL it should not be taken that they have identical performance.
81	What is the vertical load bearing capacity of the half of the header butted against the column?	Zero. The short beam does not bear on the column. Bearing calculations should take into consideration 1-ply at the column or the bearing area at the opposite side at the post for a single portal.
82	Have you done testing for anchorage pull-out?	Post-installed adhesive anchorage solutions are based on testing and finite element analysis (FEA) modeling into uncracked concrete with no supplemental reinforcement and a safety factor of 4.0 on ultimate loads when Wind Jobsite Category applies.
83	Edge distance for anchor bolts appears much too small in diagrams.....please clarify	Post-installed adhesive anchorage solutions are based on testing and finite element analysis (FEA) modeling into uncracked concrete with no supplemental reinforcement and a safety factor of 4.0 on ultimate loads when Wind Jobsite Category applies.

84	Are there concrete reinforcing requirements for anchorage support?	Yes, it is very minimal. You can find this on the PFS 2 sheet and currently we are showing that for different options for slab on grade brick ledge foundation and stemwall foundations. And you will see #4 minimum rebar typically near the top of the foundation and near the bottom of the foundation.
85	Please address interior posts at portal frames.	Trimmers/jack studs can be added to the columns of the PFS to provide additional beam reaction support or for pony wall application to provide perpendicular loading resistance.
86	How is 1/2" thickness difference between 2 LVL and 2 2x's accounted for in the hold down connection?	A nominal (min 7/16") 1/2" thick shim. It can be just at the holdown or full height. See the PFS1 structural details 4, 7 and 10 for further information. You can find the structural details at strongtie.com/pfs. Note that we also show some basic information on the shims on page four of our flier

Software, Flier, Details

85	Is there a stand alone software that combines the bracing length calculator and wall bracing selector?	No, the two are separate but by simply clicking "export to Strong-Wall Bracing Selector" within the Wall Bracing Length Calculator you in effect link the two
86	Can the website calculator be used for higher wind loads in the AWC WFCM?	The online calculator evaluates the wind speeds included in IRC Table R602.10.3.(1): 110 mph–140 mph. Buildings located in regions where the ultimate design wind speed equals or exceeds 140 mph from Figure R301.2(5)A or where wind design is required in accordance with Figure R301.2(5)B may not use the bracing provisions of the IRC (see Section R301.2.1.1).
87	2018 IRC on your calculator?	The Wall Bracing Length Calculator is currently being updated to include 2018 IRC. The Strong-Wall Bracing Selector software is currently up to date with the inclusion of the 2018 IRC.
88	Does program provide anchor design force?	The wall bracing selector software will provide anchorage solutions and embedment depths.

89	IS THE SOFTWARE AVAILABLE IN IOS	The software applications are web-based and are accessible with any web browser. Wall Bracing Length Calculator; https://www2.strongtie.com/webapps/BracedWall/ and The Strong-Wall Bracing Selector Software; https://www2.strongtie.com/webapps/strongwallbracingselector/
90	Is there structural sizing design software available. Or just use Wall-Bracing Length Calculator?	We do not have a PFS frame designer at this time. Our current software offerings include the Wall Bracing Length Calculator; https://www2.strongtie.com/webapps/BracedWall/ and The Strong-Wall Bracing Selector Software; https://www2.strongtie.com/webapps/strongwallbracingselector/
91	Is the wall length calculator usable for Canadian requirements or is there a Canadian version?	The wall-bracing length calculator is not applicable for use with Canadian requirements. At this time we do not have a Canadian version of the software.
92	Do you have published uplift values assuming no dead weight on the columns for other types of foundations / anchors for a retrofit in an existing building	We do not have published uplift values. Instead, anchorage solutions are provided and can be found in the flier, structural details and wall bracing software. https://www.strongtie.com/strongwallsitebuiltportalframesystem_strongwallshearwalls/category https://www2.strongtie.com/webapps/strongwallbracingselector/
93	Is the output a pdf file to bring into my details page?	Yes, it is available as a PDF.
94	Link the construction detailing cad files? that slide is not in the .pdf of slides	You can find the framing and anchorage structural details at strongtie.com/pfs. They are towards the bottom of the page.
95	Do you have Revit details?	No. At this time we do not have Revit details for the PFS.
96	Is it a pdf file? Any way to get a CAD compatible output	The current output file is a .pdf. We will look into adding CAD compatible outputs.

Miscellaneous, Pricing, Canadian Use

97	Do you provide screw templates in your product kit?	We do not provide a template in the kit. We do provide details sheets that include framing information.
98	Pre-drill required for DF?	No pre-drilling is required with the SDW screws
99	PFS 9x12 is a 9" wall? Think I missed something	The first number is the column width (nominal) and the second is the overall height. A PFS9x12 could be either a 2x10 column (9 1/4" wide) or a 9 1/2" wide LVL
100	How much is the kit? ***(Similar)*** Whats the price for the kits? ***(Similar)*** What are the costs for the kits?	The price will vary depending on where you purchase it. Call us at (800) 999-5099 and ask for customer service. They will be able to give you a list of retailers in your area who in turn can give you a price. You could also try contacting your local Simpson field representative if that is more convenient.
101	Are all the hardware components available in Canada and does the design software utilize Limit States Design? ***(Similar)*** When will engineering data be available based on Canadian NBC code? ***(Similar)*** Are there equivalent design programs to deal with Canadian codes?	We haven't evaluated for Canada yet, but our engineers are working on it.
102	Has CLT been consider for the portal frame?	Yes. CLT has been considered.
103	How have building officials received this new system who have not had experience with this system before? I am in Coeue d'Alene, ID	We discussed the concept with building officials in the Couer D'Alene/Spokane, Dallas and Norther Virginia areas. They all felt that an effective, easy to install solution for meeting braced wall requirements around garage portals would be an excellent thing to make available to the public.
104	Is Simpson an ICC preferred provider?	Yes, we are an ICC Preferred Provider, but this particular webinar is not pre-approved for ICC CEUs. By attending today you will earn PDHs and standard CEUs. If you are interested, we do have many free online courses that offer ICC CEUs.
105	When will the webinar recording be posted?	A recording of the webinar is available here: Meeting Braced Wall Requirements: A New Portal Frame Solution