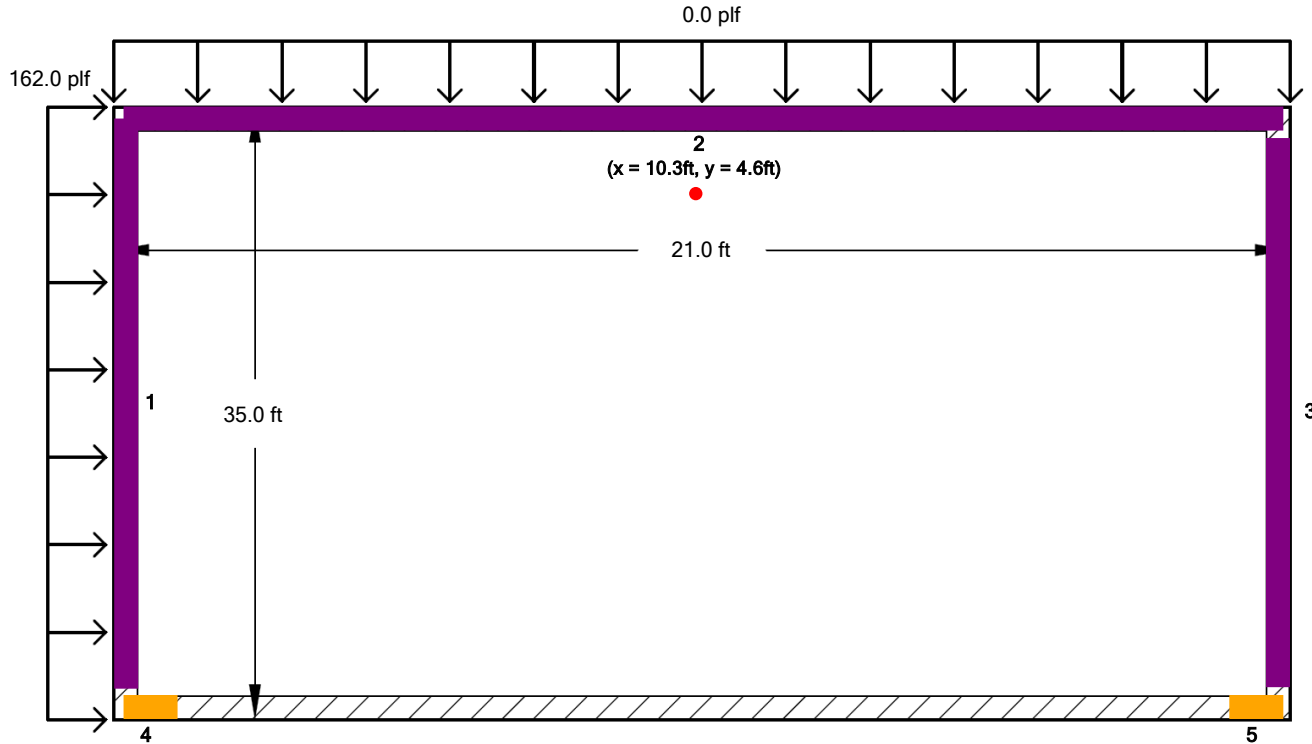


# Rigid Diaphragm Design Summary

Diaphragm Design Summary				
Diaphragm Loading	Critical Shear	Chord Forces	Diaphragm Deflection	Diaphragm Aspect Ratio
Depth Loading	161.98 plf (54%)	708.8 lbs (7%)	0.257 in	1.67 (56%)
Width Loading	0.00 plf (0%)	0.0 lbs (0%)	0.000 in	1.67 (56%)

Shear Wall Design Summary					
Wall ID	Design Shear	Chord Forces	Hold Down Capacity	Wall Deflection	Wall Aspect Ratio
Depth Loading - Wall #1	58.30 plf (16%)	524.72 lbs (5%)	524.72 lbs (17%)	0.068 in (15%)	0.27 (8%)
Depth Loading - Wall #2	161.98 plf (44%)	1457.83 lbs (14%)	1457.83 lbs (47%)	0.205 in (45%)	0.43 (12%)
Depth Loading - Wall #3	-60.49 plf (17%)	-544.37 lbs (5%)	-544.37 lbs (17%)	-0.071 in (16%)	0.28 (8%)
Depth Loading - Wall #4	477.28 plf (44%)	N/A	5154.60 lbs (34%)	0.000 in (0%)	N/A
Depth Loading - Wall #5	477.28 plf (44%)	N/A	5154.60 lbs (34%)	0.000 in (0%)	N/A
Width Loading - Wall #1	0.00 plf (0%)	0.00 lbs (0%)	0.00 lbs (0%)	0.000 in (0%)	0.27 (8%)
Width Loading - Wall #2	0.00 plf (0%)	0.00 lbs (0%)	0.00 lbs (0%)	0.000 in (0%)	0.43 (12%)
Width Loading - Wall #3	0.00 plf (0%)	0.00 lbs (0%)	0.00 lbs (0%)	0.000 in (0%)	0.28 (8%)
Width Loading - Wall #4	0.00 plf (0%)	N/A	0.00 lbs (0%)	0.000 in (0%)	N/A
Width Loading - Wall #5	0.00 plf (0%)	N/A	0.00 lbs (0%)	0.000 in (0%)	N/A

# 2015 SDPWS Rigid Diaphragm Design - Depth Loading



Drawing Not To Scale

Shear Analysis is Not Considered in Both Directions Simultaneously

Diaphragm Type	Framing Species	Panel Thickness	Nail Size/Spacing	Load Case	Construction Method	Diaphragm Capacity
Standard Diaphragm	Douglas Fir	23/32"	10d at 6"	Case 1 & 3	Unblocked	300.0 plf

Shear - Left Line	Shear - Right Line	Shear - Top Line	Shear - Bottom Line	Diaphragm Deflection	Aspect Ratio
56.2 plf (19%)	-56.2 plf (19%)	162.0 plf (54%)	45.5 plf (15%)	0.26 in @ 17.5 ft	1.67 (56%)

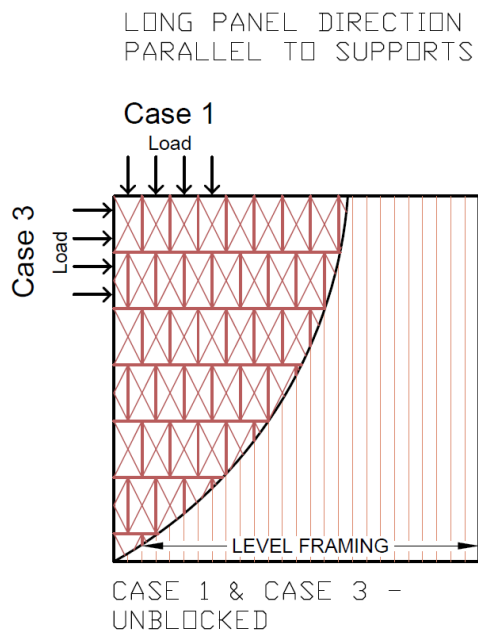
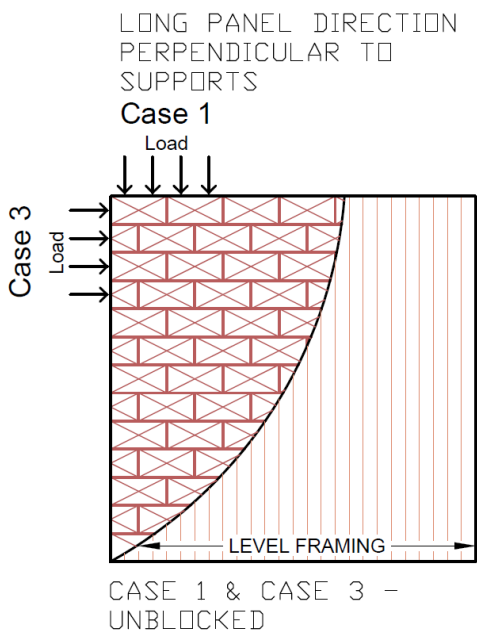
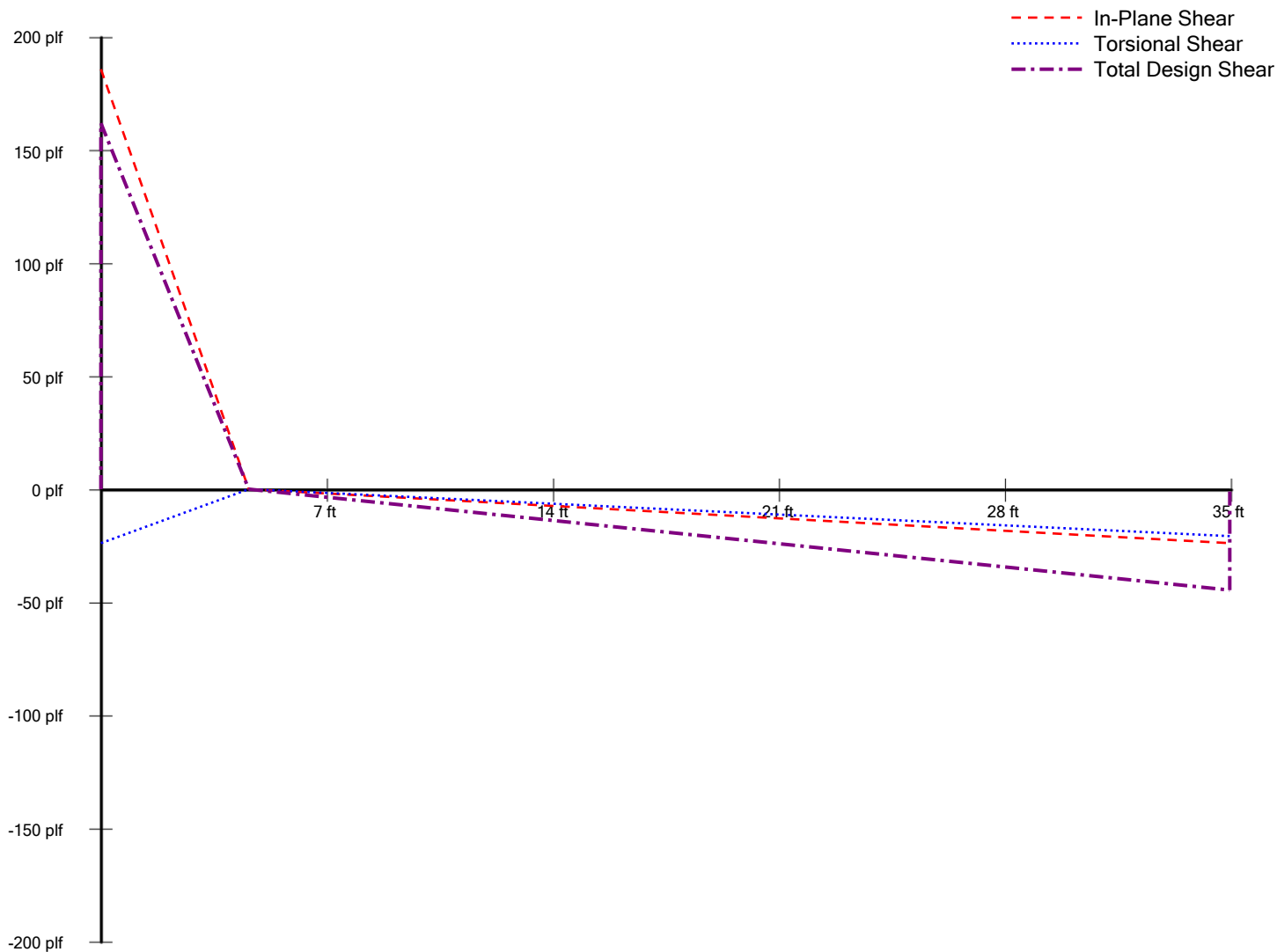
- Design loads indicated in this table have been adjusted for Allowable Stress Design, and include contributions from diaphragm shear and rigid torsional effects.
- Design diaphragm deflection is calculated assuming OSB sheathing installed in dry service conditions. If plywood sheathing is used, diaphragm shear stiffness will be reduced, which may increase diaphragm deflection.
- Deflection values are determined using design strength level wind loads.
- Design torsional loads have been increased per the amplification of accidental torsion factor ( $A_x$ ) with a value of 2.025.
- Total design torsional distance from diaphragm center of rigidity, including amplification of accidental torsion and user defined torsion, is 12.89 ft.
- This diaphragm has a horizontal structural irregularity Type 1b as defined in Table 12.3-1 in ASCE 7-16. This diaphragm is not permitted in seismic design categories E or F.
- This torsionally irregular structure has an aspect ratio of 1.67 which exceeds allowances per SDPWS Section 4.2.5.1.

Splice Length	Design Moment	Splice Tension	Splice Capacity	Min. Nail Count	Nail Size
16.0 ft	14883.8 ft-lbs	708.8 lbs (79%)	902.4 lbs	4	16d Common (0.162" x 3.5")

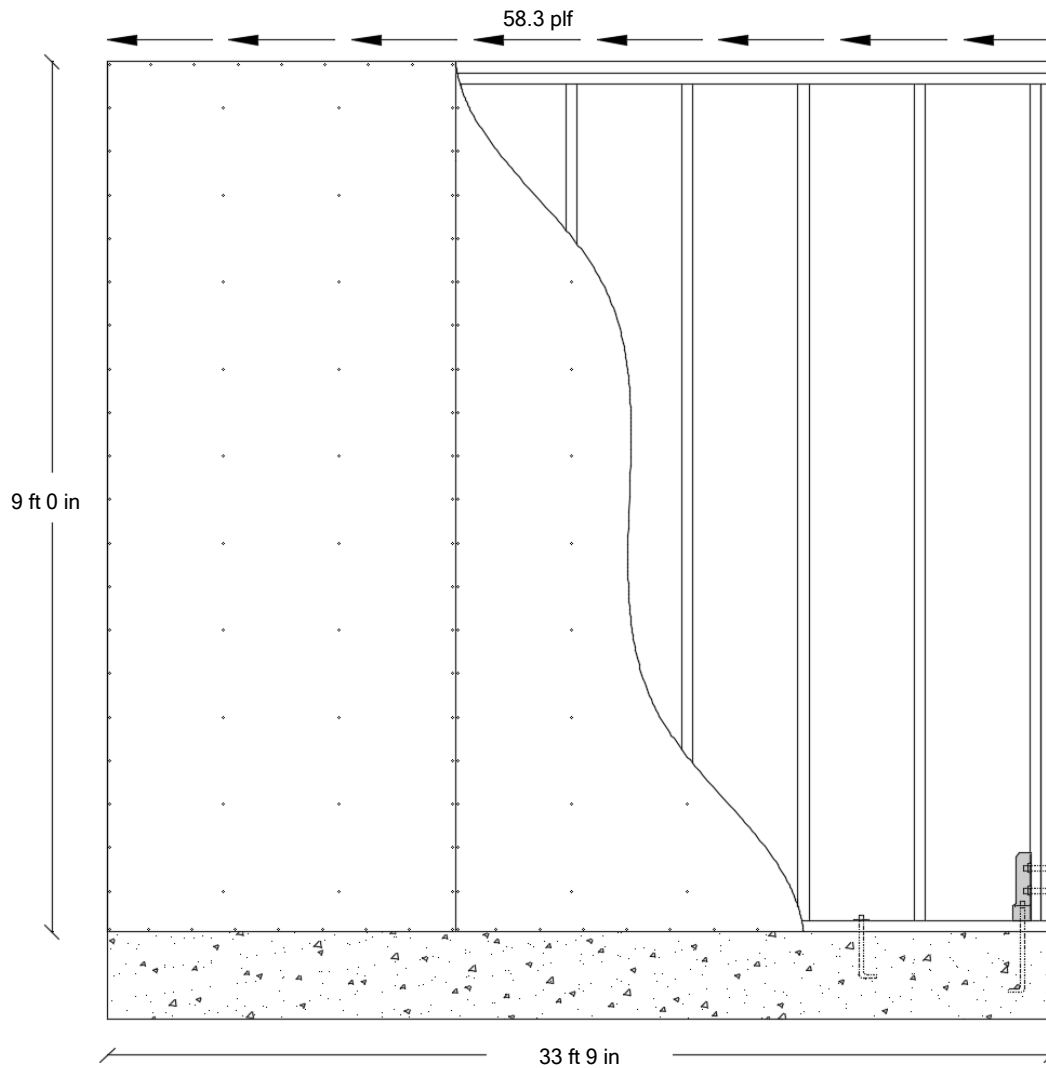
- Nail count is determined at each edge of splice. The splice assembly will require twice the nail count as indicated above to tie each end of splice together.

Diaphragm Moment	Moment Location	Chord Tension	Allowable Tension	Chord Compression	Allowable Compression
14883.8 ft-lbs	17.50 ft From Top	708.8 lbs (7%)	9867.0 lbs	708.8 lbs (4%)	19274.1 lbs

# 2015 SDPWS Rigid Diaphragm Design - Depth Loading



# Shear Wall #1 Design - Depth Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Stud Species	Panel Thickness	Nail Size	Edge Nail Spacing	Construction Type	Wall Capacity	Stud Size	Stud Spacing
Douglas Fir	7/16"	8d	6"	Single Panel	365 plf	2x6	16 in

Wall Aspect Ratio	Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.27 (8%)	1968.1 lbs	0.0 lbs	58.30 plf (16%)	0.068 in (15%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design.
- Allowable deflection limits are determined per Table 12.12-1 of ASCE 7-16. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Design wall deflection is calculated assuming OSB wall sheathing installed in dry service conditions. If plywood sheathing is used, wall shear stiffness will be reduced, which may increase the design wall deflection.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.
- Design torsional loads have been increased per the amplification of accidental torsion factor (Ax) with a value of 2.025.

Chord Size	Design Tension	Allowable Tension	Allowable Chord Compression	Design Plate Compression	Allowable Plate Compression
Double 2x6 Douglas Fir	524.72 lbs (3%)	19734.0 lbs	17554.6 lbs	524.72 lbs (5%)	10312.5 lbs

- All wall framing analysis is determined assuming visual grade #2 lumber.
- Plate compression does not consider compression performance of floor sheathing. Additional analysis may be necessary to accommodate sheathing compression allowance.
- A 0.6 design adjustment has been taken to chord compression to accommodate this multi-ply assembly.

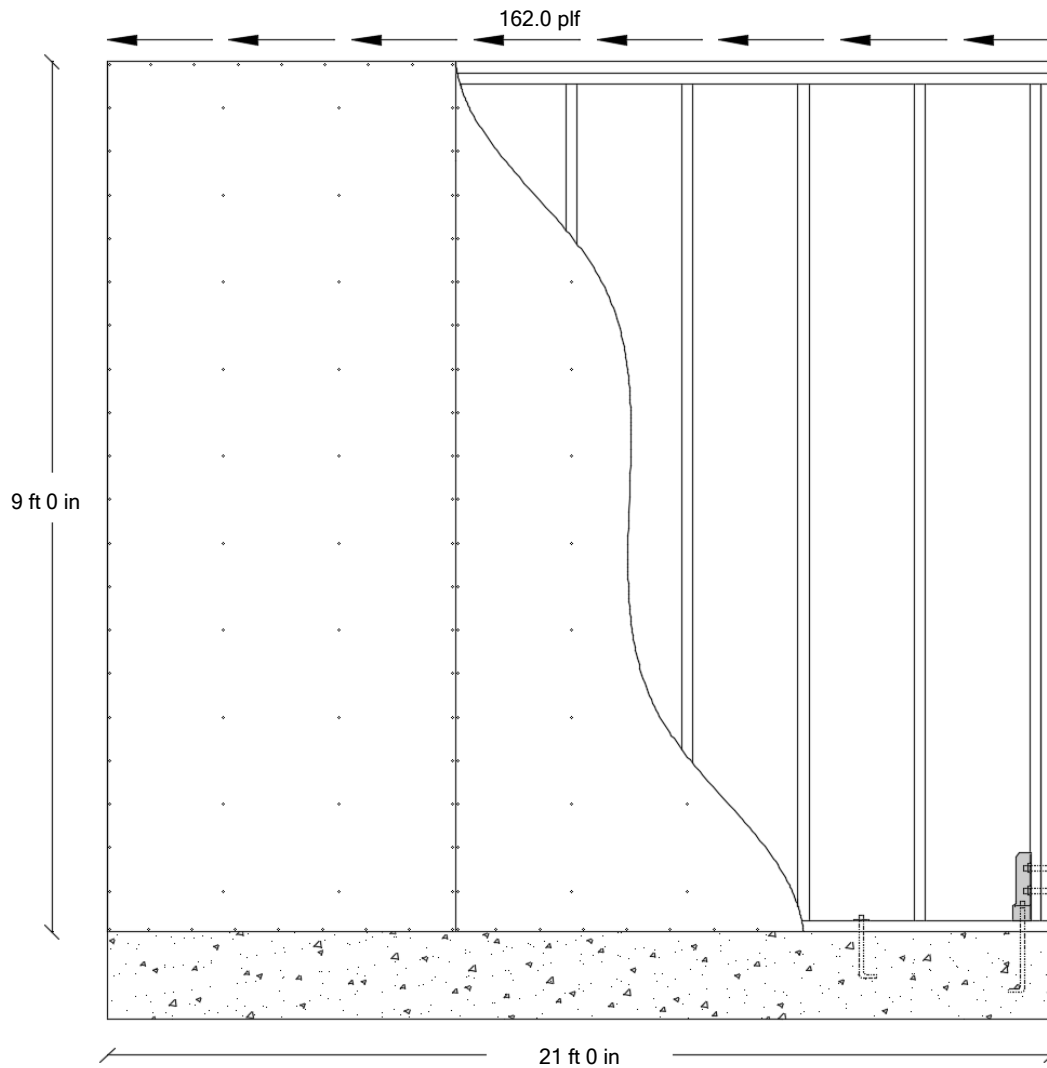
Hold Down	Design Tension	Tension Capacity	Design Deflection	Allowable Deflection
HD3B	524.72 lbs (17%)	3130.0 lbs	0.020 in (17%)	0.120 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.

Total Design Load	Anchor Bolt Size	Anchor Bolt Spacing	Washer Size	Nail Size	Nail Spacing
58.3 plf	5/8"	306 in	Standard cut washer	16d Common	46 in

- Use either the anchor bolt or nailed connection options listed above, dependent upon what structural support is below this shear wall.
- Nail spacing shows 16d common installed in a single row. This spacing does not account for additional load from walls at levels above, and may be increased if rim board and plate below can accommodate multiple rows of fasteners.

# Shear Wall #2 Design - Depth Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Stud Species	Panel Thickness	Nail Size	Edge Nail Spacing	Construction Type	Wall Capacity	Stud Size	Stud Spacing
Douglas Fir	7/16"	8d	6"	Single Panel	365 plf	2x6	16 in

Wall Aspect Ratio	Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.43 (12%)	-505.9 lbs	3907.5 lbs	161.98 plf (44%)	0.205 in (45%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design.
- Allowable deflection limits are determined per Table 12.12-1 of ASCE 7-16. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Design wall deflection is calculated assuming OSB wall sheathing installed in dry service conditions. If plywood sheathing is used, wall shear stiffness will be reduced, which may increase the design wall deflection.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.
- Design torsional loads have been increased per the amplification of accidental torsion factor (Ax) with a value of 2.025.

Chord Size	Design Tension	Allowable Tension	Allowable Chord Compression	Design Plate Compression	Allowable Plate Compression
Double 2x6 Douglas Fir	1457.83 lbs (8%)	19734.0 lbs	17554.6 lbs	1457.83 lbs (14%)	10312.5 lbs

- All wall framing analysis is determined assuming visual grade #2 lumber.
- Plate compression does not consider compression performance of floor sheathing. Additional analysis may be necessary to accommodate sheathing compression allowance.
- A 0.6 design adjustment has been taken to chord compression to accommodate this multi-ply assembly.

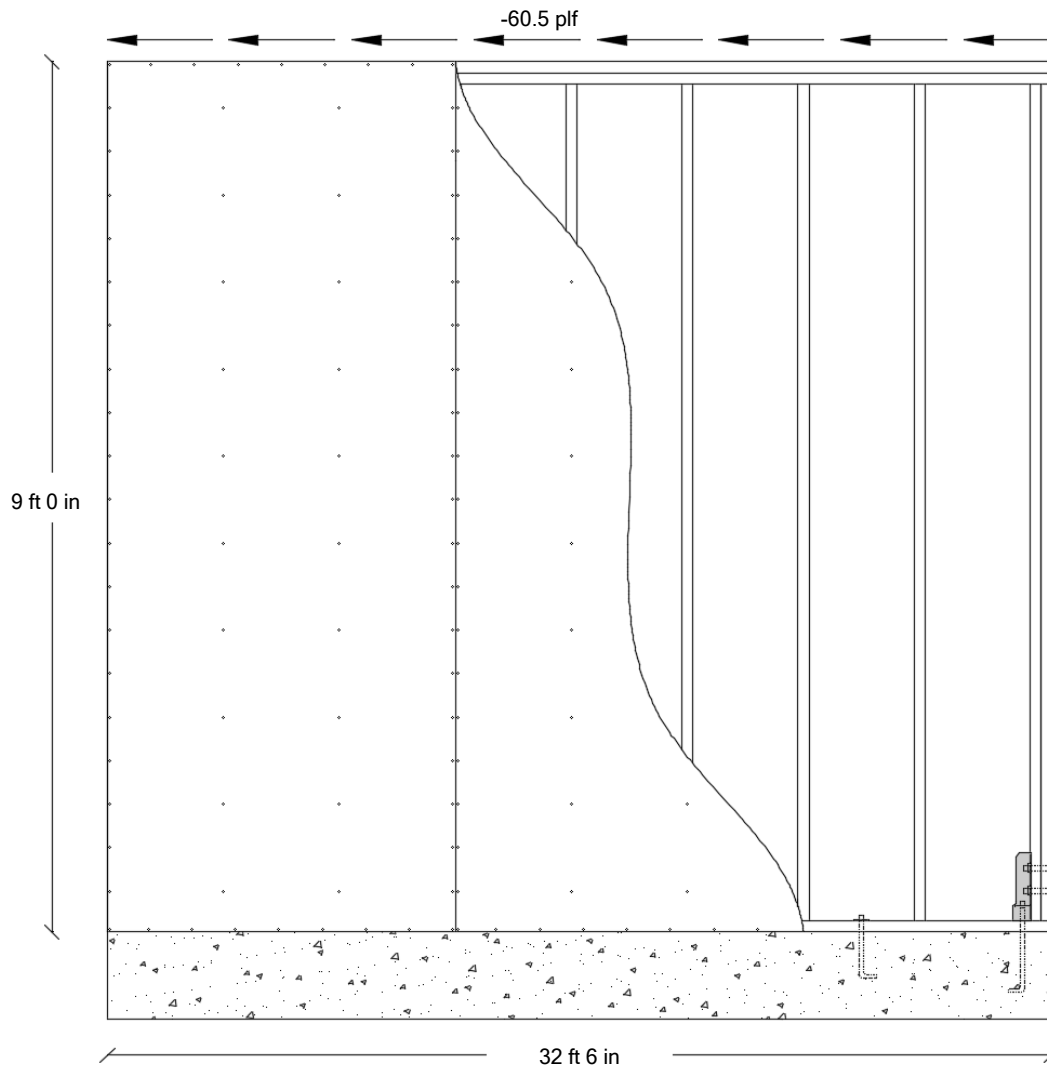
Hold Down	Design Tension	Tension Capacity	Design Deflection	Allowable Deflection
HD3B	1457.83 lbs (47%)	3130.0 lbs	0.056 in (47%)	0.120 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.

Total Design Load	Anchor Bolt Size	Anchor Bolt Spacing	Washer Size	Nail Size	Nail Spacing
162.0 plf	5/8"	110 in	Standard cut washer	16d Common	16 in

- Use either the anchor bolt or nailed connection options listed above, dependent upon what structural support is below this shear wall.
- Nail spacing shows 16d common installed in a single row. This spacing does not account for additional load from walls at levels above, and may be increased if rim board and plate below can accommodate multiple rows of fasteners.

# Shear Wall #3 Design - Depth Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Stud Species	Panel Thickness	Nail Size	Edge Nail Spacing	Construction Type	Wall Capacity	Stud Size	Stud Spacing
Douglas Fir	7/16"	8d	6"	Single Panel	365 plf	2x6	16 in

Wall Aspect Ratio	Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.28 (8%)	-1966.6 lbs	0.0 lbs	-60.49 plf (17%)	-0.071 in (16%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design.
- Allowable deflection limits are determined per Table 12.12-1 of ASCE 7-16. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Design wall deflection is calculated assuming OSB wall sheathing installed in dry service conditions. If plywood sheathing is used, wall shear stiffness will be reduced, which may increase the design wall deflection.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.
- Design torsional loads have been increased per the amplification of accidental torsion factor (Ax) with a value of 2.025.

Chord Size	Design Tension	Allowable Tension	Allowable Chord Compression	Design Plate Compression	Allowable Plate Compression
Double 2x6 Douglas Fir	544.37 lbs (3%)	19734.0 lbs	17554.6 lbs	544.37 lbs (5%)	10312.5 lbs

- All wall framing analysis is determined assuming visual grade #2 lumber.
- Plate compression does not consider compression performance of floor sheathing. Additional analysis may be necessary to accommodate sheathing compression allowance.
- A 0.6 design adjustment has been taken to chord compression to accommodate this multi-ply assembly.

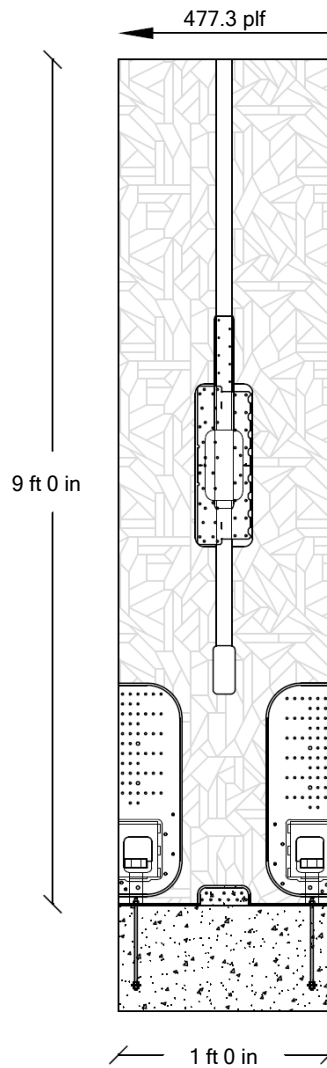
Hold Down	Design Tension	Tension Capacity	Design Deflection	Allowable Deflection
HD3B	544.37 lbs (17%)	3130.0 lbs	0.021 in (17%)	0.120 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.

Total Design Load	Anchor Bolt Size	Anchor Bolt Spacing	Washer Size	Nail Size	Nail Spacing
-60.5 plf	5/8"	295 in	Standard cut washer	16d Common	44 in

- Use either the anchor bolt or nailed connection options listed above, dependent upon what structural support is below this shear wall.
- Nail spacing shows 16d common installed in a single row. This spacing does not account for additional load from walls at levels above, and may be increased if rim board and plate below can accommodate multiple rows of fasteners.

# Shear Wall #4 Design - Depth Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Wall Type	Wall Capacity	Min Allowable Wall Height	Max Allowable Wall Height	Wall Stud Size
WSWH 12x9	1095 plf	6 ft 2.5 in	9 ft	2x6

- Install the panel flush to the outside face of the framing and add furring to the inside face as required to accommodate finish material.

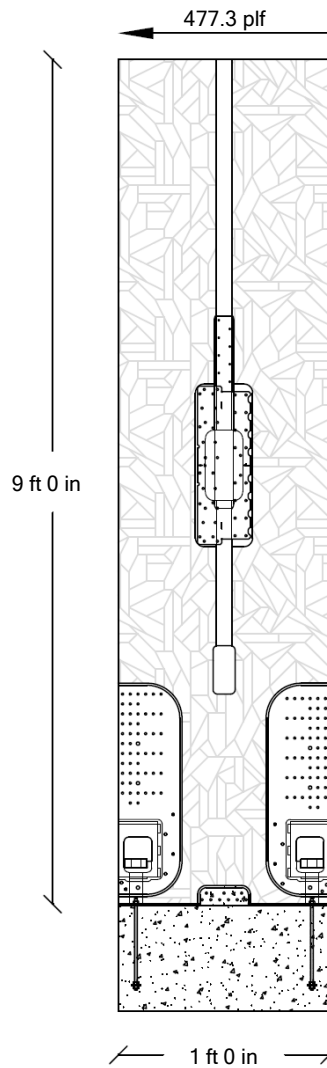
Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
219.7 lbs	257.5 lbs	477.28 plf (44%)	0.000 in (0%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design, and assumes minimum 2,500 psi concrete below.
- Allowable deflection limits are defined in Simpson Strong-Tie C-L-SW21. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.
- Design torsional loads have been increased per the amplification of accidental torsion factor ( $A_x$ ) with a value of 2.025.

Hold Down	Design Tension	Tension Capacity	Bolt Diameter	Minimum Bolt Embedment
WSWH-AB Anchor Bolt	5154.60 lbs (34%)	15145.0 lbs	1.0 in	15.5 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.
- Additional concrete reinforcement may be required to achieve listed anchor design loads. Refer to Simpson Strong-Tie C-L-SW21 for additional information.

# Shear Wall #5 Design - Depth Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Wall Type	Wall Capacity	Min Allowable Wall Height	Max Allowable Wall Height	Wall Stud Size
WSWH 12x9	1095 plf	6 ft 2.5 in	9 ft	2x6

- Install the panel flush to the outside face of the framing and add furring to the inside face as required to accommodate finish material.

Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
219.7 lbs	257.5 lbs	477.28 plf (44%)	0.000 in (0%)	0.450 in

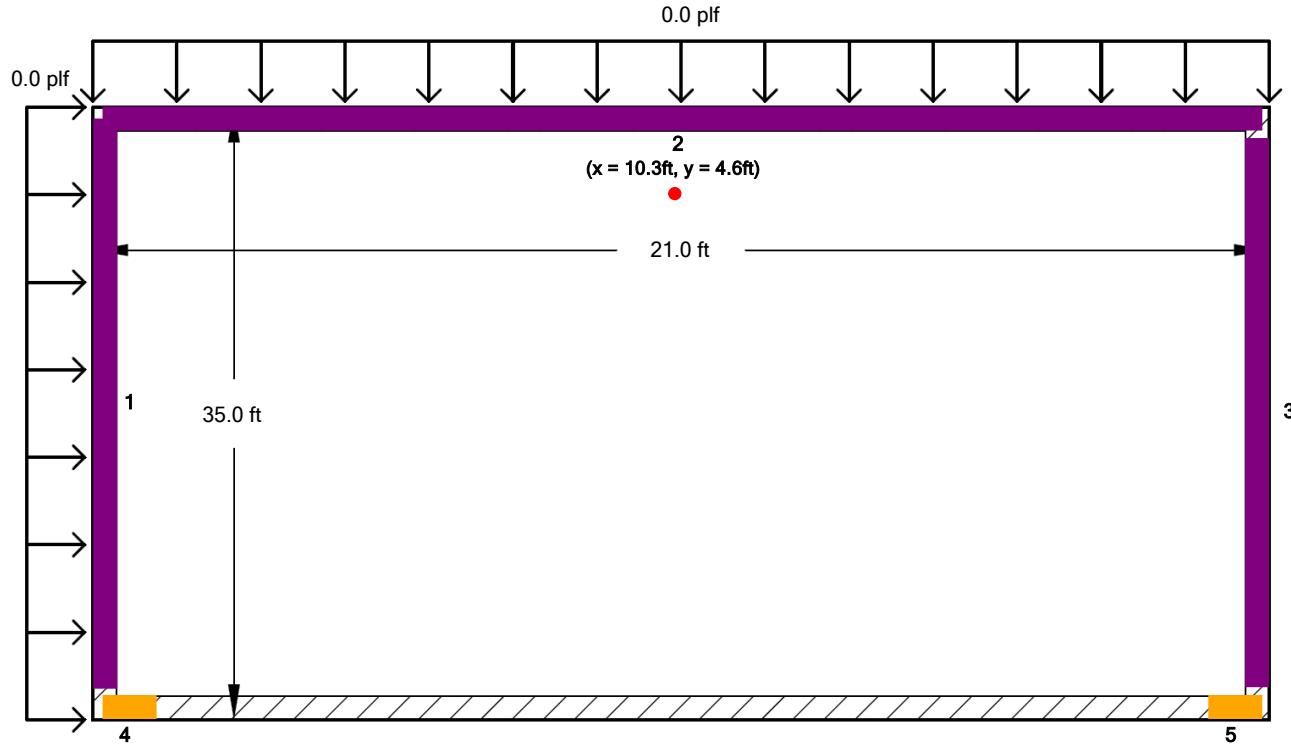
- Design loads indicated in this table have been adjusted for Allowable Stress Design, and assumes minimum 2,500 psi concrete below.
- Allowable deflection limits are defined in Simpson Strong-Tie C-L-SW21. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.
- Design torsional loads have been increased per the amplification of accidental torsion factor ( $A_x$ ) with a value of 2.025.

Hold Down	Design Tension	Tension Capacity	Bolt Diameter	Minimum Bolt Embedment
WSWH-AB Anchor Bolt	5154.60 lbs (34%)	15145.0 lbs	1.0 in	15.5 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.
- Additional concrete reinforcement may be required to achieve listed anchor design loads. Refer to Simpson Strong-Tie C-L-SW21 for additional information.



# 2015 SDPWS Rigid Diaphragm Design - Width Loading



Drawing Not To Scale

Shear Analysis is Not Considered in Both Directions Simultaneously

Diaphragm Type	Framing Species	Panel Thickness	Nail Size/Spacing	Load Case	Construction Method	Diaphragm Capacity
Standard Diaphragm	Douglas Fir	23/32"	10d at 6"	Case 1 & 3	Unblocked	300.0 plf

Shear - Left Line	Shear - Right Line	Shear - Top Line	Shear - Bottom Line	Diaphragm Deflection	Aspect Ratio
0.0 plf (0%)	0.0 plf (0%)	0.0 plf (0%)	0.0 plf (0%)	0.00 in @ 10.5 ft	1.67 (56%)

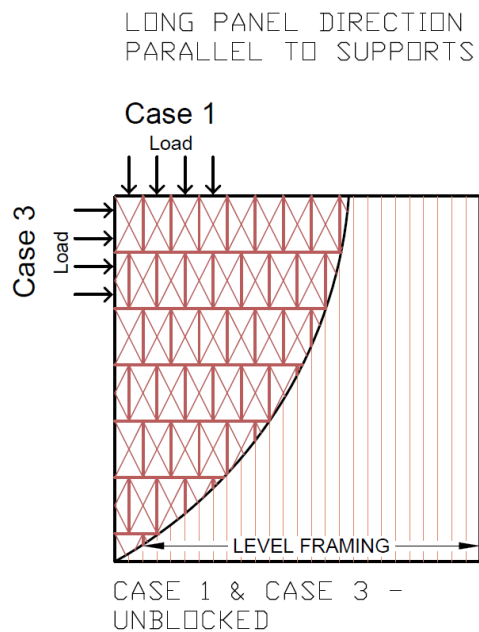
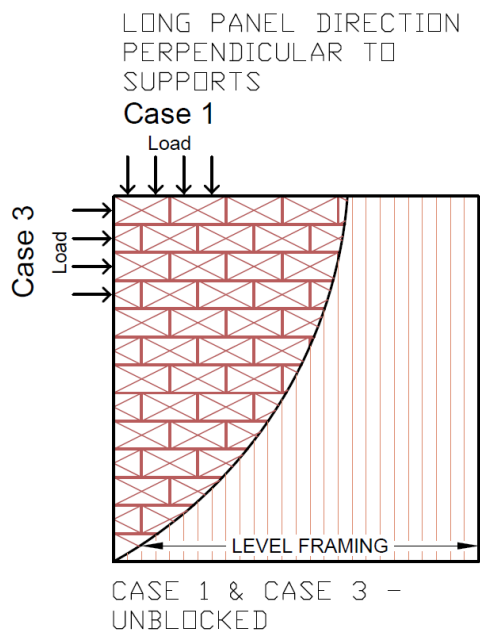
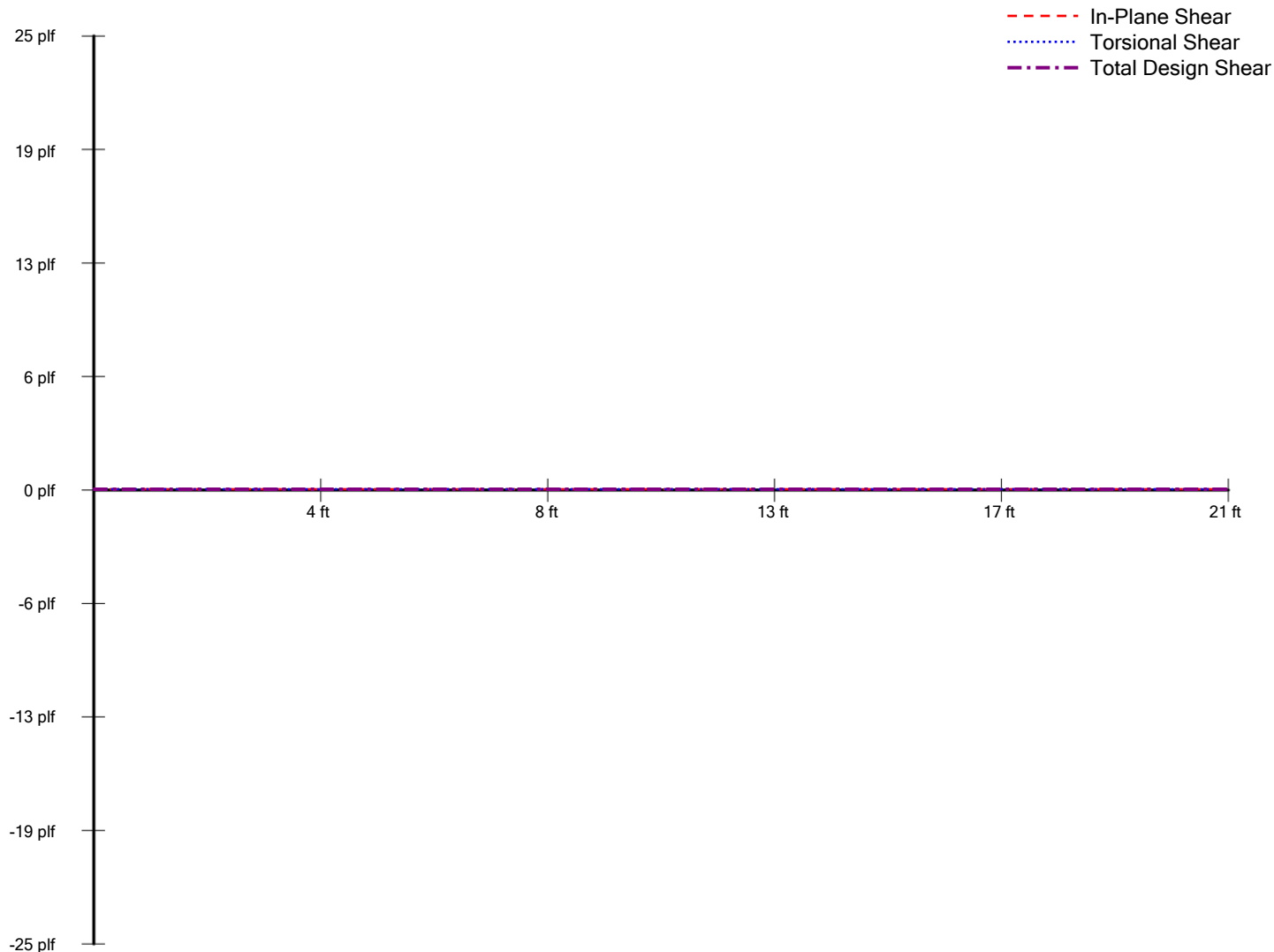
- Design loads indicated in this table have been adjusted for Allowable Stress Design, and include contributions from diaphragm shear and rigid torsional effects.
- Design diaphragm deflection is calculated assuming OSB sheathing installed in dry service conditions. If plywood sheathing is used, diaphragm shear stiffness will be reduced, which may increase diaphragm deflection.
- Deflection values are determined using design strength level wind loads.
- Total design torsional distance from diaphragm center of rigidity, including amplification of accidental torsion and user defined torsion, is 0.22 ft.

Splice Length	Design Moment	Splice Tension	Splice Capacity	Min. Nail Count	Nail Size
16.0 ft	0.0 ft-lbs	0.0 lbs (0%)	225.6 lbs	1	16d Common (0.162" x 3.5")

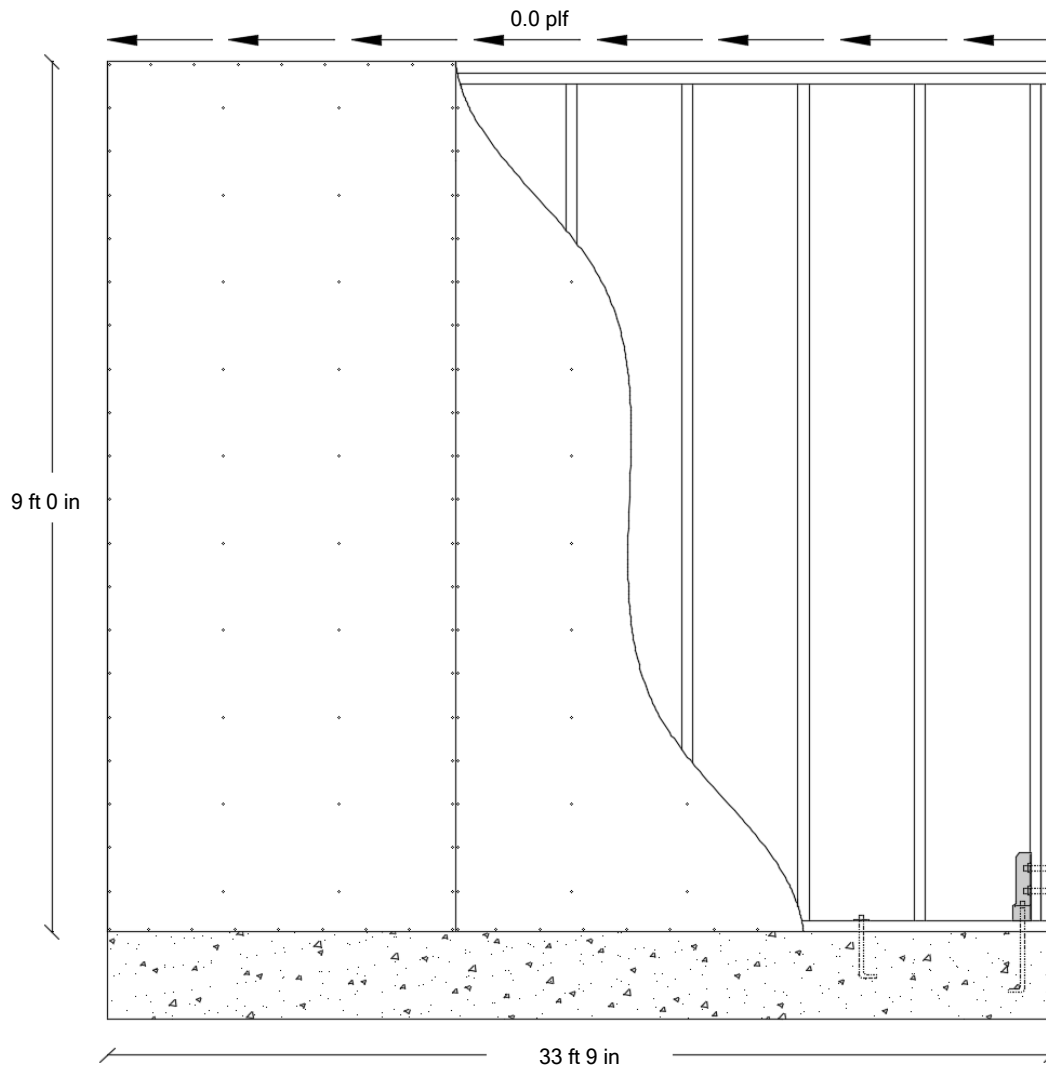
- Nail count is determined at each edge of splice. The splice assembly will require twice the nail count as indicated above to tie each end of splice together.

Diaphragm Moment	Moment Location	Chord Tension	Allowable Tension	Chord Compression	Allowable Compression
0.0 ft-lbs	10.50 ft From Left	0.0 lbs (0%)	9867.0 lbs	0.0 lbs (0%)	19274.1 lbs

# 2015 SDPWS Rigid Diaphragm Design - Width Loading



# Shear Wall #1 Design - Width Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Stud Species	Panel Thickness	Nail Size	Edge Nail Spacing	Construction Type	Wall Capacity	Stud Size	Stud Spacing
Douglas Fir	7/16"	8d	6"	Single Panel	365 plf	2x6	16 in

Wall Aspect Ratio	Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.27 (8%)	0.0 lbs	0.0 lbs	0.00 plf (0%)	0.000 in (0%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design.
- Allowable deflection limits are determined per Table 12.12-1 of ASCE 7-16. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Design wall deflection is calculated assuming OSB wall sheathing installed in dry service conditions. If plywood sheathing is used, wall shear stiffness will be reduced, which may increase the design wall deflection.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.

Chord Size	Design Tension	Allowable Tension	Allowable Chord Compression	Design Plate Compression	Allowable Plate Compression
Double 2x6 Douglas Fir	0.00 lbs (0%)	19734.0 lbs	17554.6 lbs	0.00 lbs (0%)	10312.5 lbs

- All wall framing analysis is determined assuming visual grade #2 lumber.
- Plate compression does not consider compression performance of floor sheathing. Additional analysis may be necessary to accommodate sheathing compression allowance.
- A 0.6 design adjustment has been taken to accommodate this multi-ply assembly.

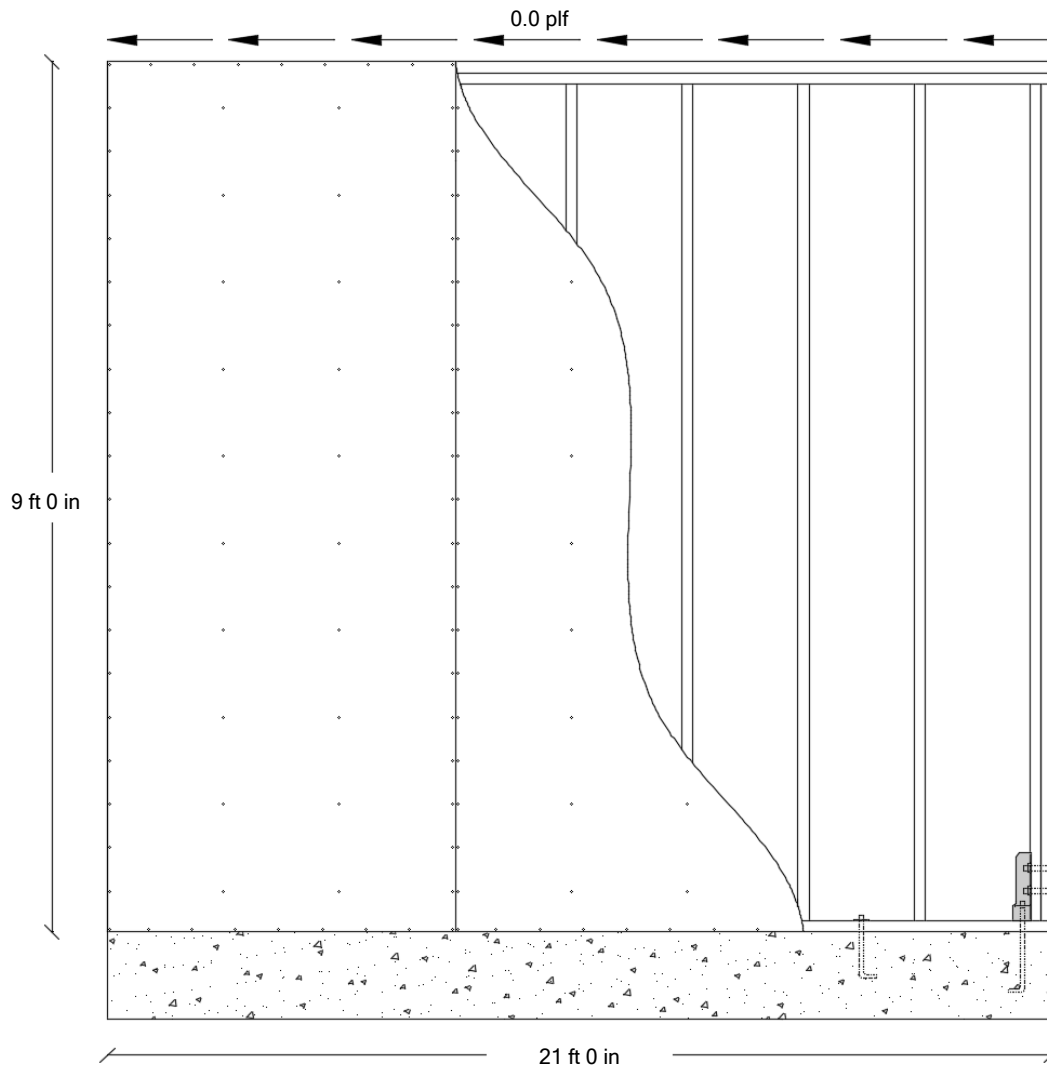
Hold Down	Design Tension	Tension Capacity	Design Deflection	Allowable Deflection
HD3B	0.00 lbs (0%)	3130.0 lbs	0.000 in (0%)	0.120 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.

Total Design Load	Anchor Bolt Size	Anchor Bolt Spacing	Washer Size	Nail Size	Nail Spacing
0.0 plf	5/8"	950878599 in	Standard cut washer	16d Common	144165465 in

- Use either the anchor bolt or nailed connection options listed above, dependent upon what structural support is below this shear wall.
- Nail spacing shows 16d common installed in a single row. This spacing does not account for additional load from walls at levels above, and may be increased if rim board and plate below can accommodate multiple rows of fasteners.

# Shear Wall #2 Design - Width Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Stud Species	Panel Thickness	Nail Size	Edge Nail Spacing	Construction Type	Wall Capacity	Stud Size	Stud Spacing
Douglas Fir	7/16"	8d	6"	Single Panel	365 plf	2x6	16 in

Wall Aspect Ratio	Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.43 (12%)	0.0 lbs	0.0 lbs	0.00 plf (0%)	0.000 in (0%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design.
- Allowable deflection limits are determined per Table 12.12-1 of ASCE 7-16. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Design wall deflection is calculated assuming OSB wall sheathing installed in dry service conditions. If plywood sheathing is used, wall shear stiffness will be reduced, which may increase the design wall deflection.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.

Chord Size	Design Tension	Allowable Tension	Allowable Chord Compression	Design Plate Compression	Allowable Plate Compression
Double 2x6 Douglas Fir	0.00 lbs (0%)	19734.0 lbs	17554.6 lbs	0.00 lbs (0%)	10312.5 lbs

- All wall framing analysis is determined assuming visual grade #2 lumber.
- Plate compression does not consider compression performance of floor sheathing. Additional analysis may be necessary to accommodate sheathing compression allowance.
- A 0.6 design adjustment has been taken to accommodate this multi-ply assembly.

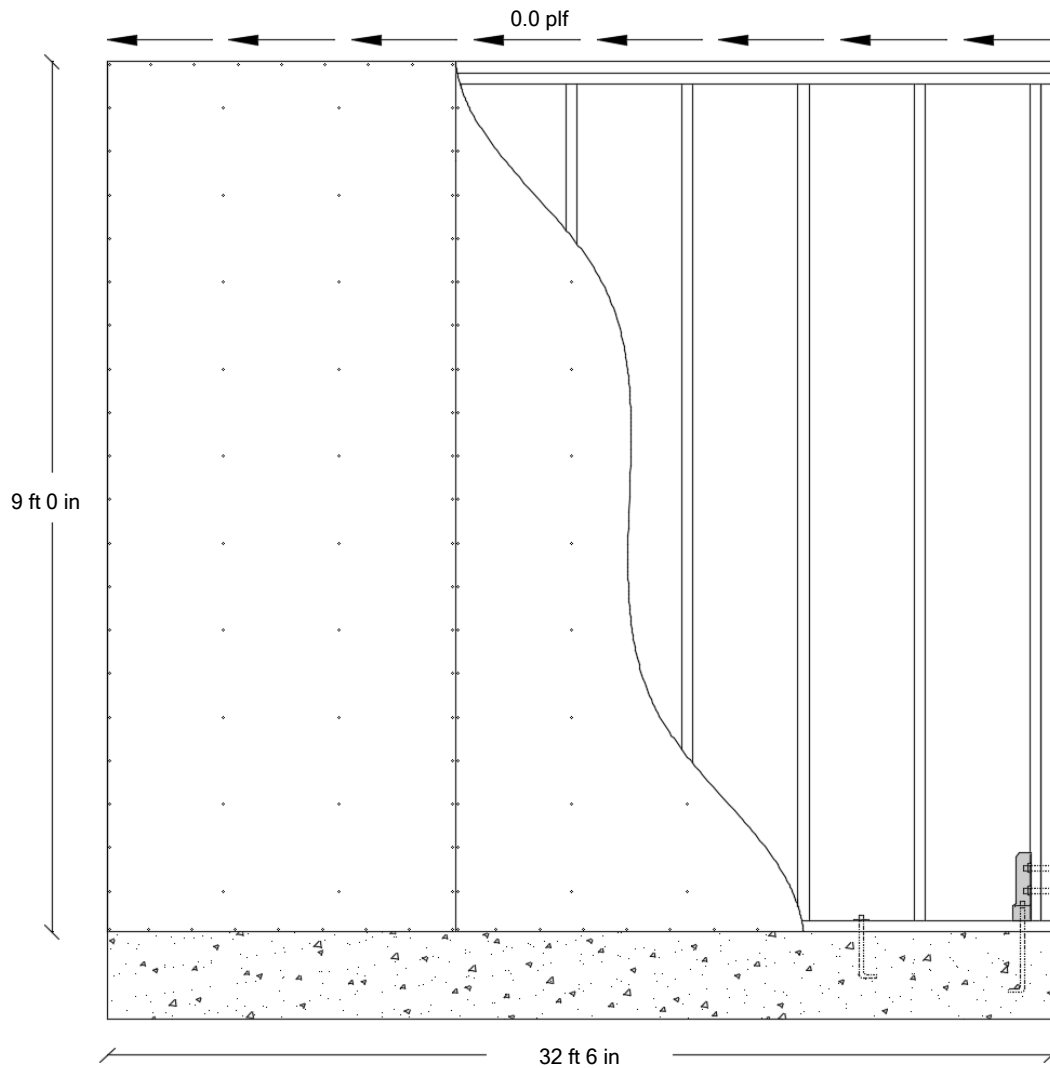
Hold Down	Design Tension	Tension Capacity	Design Deflection	Allowable Deflection
HD3B	0.00 lbs (0%)	3130.0 lbs	0.000 in (0%)	0.120 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.

Total Design Load	Anchor Bolt Size	Anchor Bolt Spacing	Washer Size	Nail Size	Nail Spacing
0.0 plf	5/8"	151523896082 in	Standard cut washer	16d Common	22972977793 in

- Use either the anchor bolt or nailed connection options listed above, dependent upon what structural support is below this shear wall.
- Nail spacing shows 16d common installed in a single row. This spacing does not account for additional load from walls at levels above, and may be increased if rim board and plate below can accommodate multiple rows of fasteners.

# Shear Wall #3 Design - Width Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Stud Species	Panel Thickness	Nail Size	Edge Nail Spacing	Construction Type	Wall Capacity	Stud Size	Stud Spacing
Douglas Fir	7/16"	8d	6"	Single Panel	365 plf	2x6	16 in

Wall Aspect Ratio	Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.28 (8%)	0.0 lbs	0.0 lbs	0.00 plf (0%)	0.000 in (0%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design.
- Allowable deflection limits are determined per Table 12.12-1 of ASCE 7-16. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Design wall deflection is calculated assuming OSB wall sheathing installed in dry service conditions. If plywood sheathing is used, wall shear stiffness will be reduced, which may increase the design wall deflection.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.

Chord Size	Design Tension	Allowable Tension	Allowable Chord Compression	Design Plate Compression	Allowable Plate Compression
Double 2x6 Douglas Fir	0.00 lbs (0%)	19734.0 lbs	17554.6 lbs	0.00 lbs (0%)	10312.5 lbs

- All wall framing analysis is determined assuming visual grade #2 lumber.
- Plate compression does not consider compression performance of floor sheathing. Additional analysis may be necessary to accommodate sheathing compression allowance.
- A 0.6 design adjustment has been taken to accommodate this multi-ply assembly.

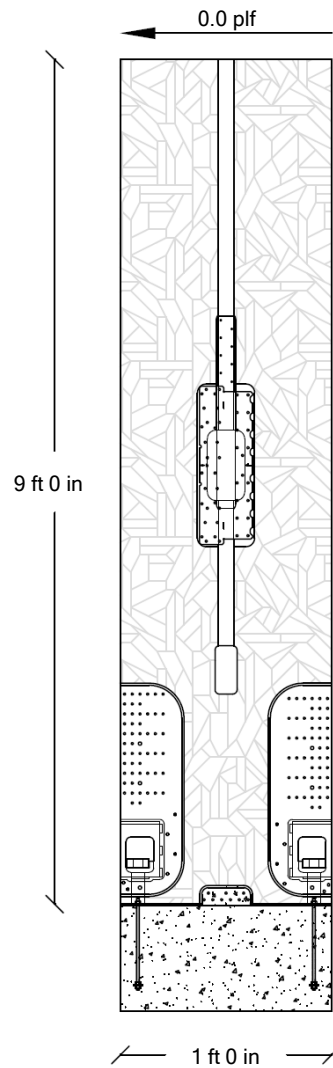
Hold Down	Design Tension	Tension Capacity	Design Deflection	Allowable Deflection
HD3B	0.00 lbs (0%)	3130.0 lbs	0.000 in (0%)	0.120 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.

Total Design Load	Anchor Bolt Size	Anchor Bolt Spacing	Washer Size	Nail Size	Nail Spacing
0.0 plf	5/8"	927240032 in	Standard cut washer	16d Common	140581553 in

- Use either the anchor bolt or nailed connection options listed above, dependent upon what structural support is below this shear wall.
- Nail spacing shows 16d common installed in a single row. This spacing does not account for additional load from walls at levels above, and may be increased if rim board and plate below can accommodate multiple rows of fasteners.

# Shear Wall #4 Design - Width Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Wall Type	Wall Capacity	Min Allowable Wall Height	Max Allowable Wall Height	Wall Stud Size
WSWH 12x9	1095 plf	6 ft 2.5 in	9 ft	2x6

- Install the panel flush to the outside face of the framing and add furring to the inside face as required to accommodate finish material.

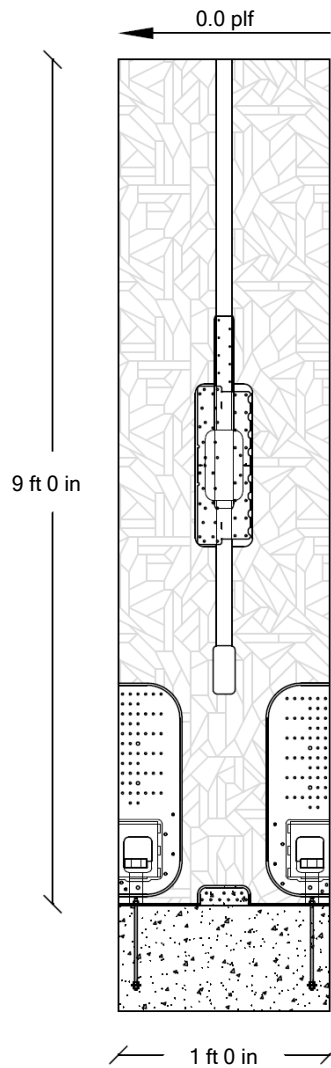
Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.0 lbs	0.0 lbs	0.00 plf (0%)	0.000 in (0%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design, and assumes minimum 2,500 psi concrete below.
- Allowable deflection limits are defined in Simpson Strong-Tie C-L-SW21. More stringent deflection criteria may be required for windows, doors, or other finish material.
- Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.

Hold Down	Design Tension	Tension Capacity	Bolt Diameter	Minimum Bolt Embedment
WSWH-AB Anchor Bolt	0.00 lbs (0%)	15145.0 lbs	1.0 in	15.5 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.
- Additional concrete reinforcement may be required to achieve listed anchor design loads. Refer to Simpson Strong-Tie C-L-SW21 for additional information.

# Shear Wall #5 Design - Width Loading



This drawing is conceptual. Actual construction methods & dimensions may differ from that which is shown above.

Wall Type	Wall Capacity	Min Allowable Wall Height	Max Allowable Wall Height	Wall Stud Size
WSWH 12x9	1095 plf	6 ft 2.5 in	9 ft	2x6

- Install the panel flush to the outside face of the framing and add furring to the inside face as required to accommodate finish material.

Torsional Load	Diaphragm Shear	Total Design Load	Wall Deflection	Allowable Deflection
0.0 lbs	0.0 lbs	0.00 plf (0%)	0.000 in (0%)	0.450 in

- Design loads indicated in this table have been adjusted for Allowable Stress Design, and assumes minimum 2,500 psi concrete below.  
 - Allowable deflection limits are defined in Simpson Strong-Tie C-L-SW21. More stringent deflection criteria may be required for windows, doors, or other finish material.  
 - Deflection values are determined using design strength level wind loads. Deflection limits are set to a value of L/240.

Hold Down	Design Tension	Tension Capacity	Bolt Diameter	Minimum Bolt Embedment
WSWH-AB Anchor Bolt	0.00 lbs (0%)	15145.0 lbs	1.0 in	15.5 in

- Hold down tension loads have not been adjusted for the stabilizing moment induced by design dead load overtop this shear wall.  
 - Additional concrete reinforcement may be required to achieve listed anchor design loads. Refer to Simpson Strong-Tie C-L-SW21 for additional information.